IMPERIAL JAPANESE NAVY DESTROYERS 1919–45 (2)

Asashio to Tachibana Classes

MARK STILLE

ILLUSTRATED BY PAUL WRIGHT

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EDITOR'S NOTE

For ease of comparison please refer to the following conversion table:
1 mile = 1.6km
1yd = 0.9m
1ft = 0.3m
1in = 2.54cm/25.4mm
1 gallon (Imperial) = 4.5 litres
1lb = 0.45kg

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IMPERIAL JAPANESE NAVY DESTROYERS 1919–45 (2)
ASASHIO TO TACHIBANA CLASSES

INTRODUCTION

The Imperial Navy's destroyer force played an important role in the Pacific War. It was integral to the period of Japanese expansion from December 1941 until May 1942, and then played a central role in the bitter battles around Guadalcanal from August 1942 until February 1943. In the campaign in the central and northern Solomons through the rest of 1943, Japanese destroyers were essentially left to fend for themselves against the increasing power of the US Navy. These superb offensive platforms performed well in the initial period of the war, but as the American offensive in the South Pacific and later the Central Pacific gained speed, the weaknesses of Japanese destroyers were ruthlessly exposed.

This second volume on the Imperial Navy's destroyer force will cover the ships of the Asashio, Kagero, Yugumo, Shimakaze, Akizuki, and Matsu/Tachibana classes, totaling 93 units. It will not repeat information already provided in the first volume (see New Vanguard 198) on destroyer tactics and the weaponry and sensors carried aboard Japanese destroyers.

JAPANESE DESTROYER DESIGN PRINCIPLES

The destroyers covered in this volume, principally the Asashio, Kagero, and Yugumo classes, constituted the core of Japan's wartime destroyer force. These ships were at the center of almost all significant operations. The Asashio, Kagero, and Yugumo classes (the latter two classes referred to by the Japanese as Type A units) were essentially a return to the Special Type ships from the late 1920s, since all were designed for maximum firepower and speed and were built without reference to treaty restrictions. These ships continued the Japanese emphasis on a heavy torpedo armament. A heavy gun armament was also an important design criterion, but these weapons were not dual purpose, which proved a major weakness later in the war. When combined with inferior antisubmarine sensors and weapons, the result was an unbalanced design. Type A units were superb torpedo boats, but lacked the attributes required for a truly successful fleet destroyer.

The large Type B, or Akizuki class, was a better-balanced design. These ships featured a reduced torpedo armament, but included a true dual-purpose gun battery. However, these large ships were too complex for mass production and, of the 12 units produced, most entered service too late to make a difference.

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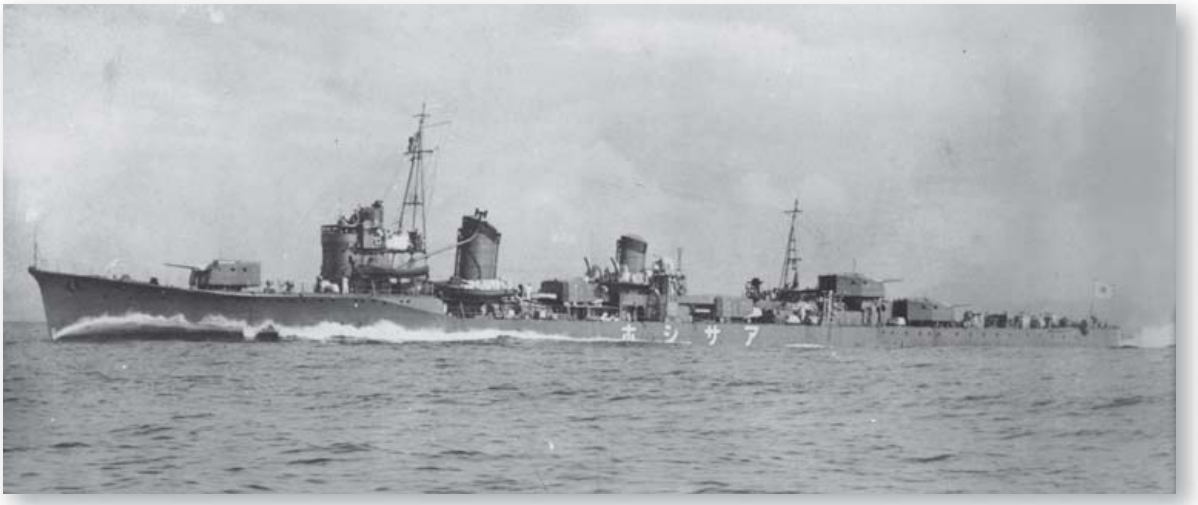

Asashio, shown here in July 1937, probably on sea trials. The ship projects a fine balance of power and speed. *Asashio* had an active wartime career until being one of the four destroyers sunk at the Battle of the Bismarck Sea in March 1943. (Yamato Museum)

JAPANESE NAVAL STRATEGY AND THE ROLE OF THE DESTROYER

The course of the Pacific War did not go as the Japanese planned. In large measure, Japanese destroyers were designed for the anticipated climactic naval clash between the American and Japanese battle fleets, during which the Imperial Navy's destroyers would play a featured role. Because the Japanese were locked into a position of numerical inferiority in capital ships by a series of interwar naval treaties, Japanese destroyers were part of an elaborate attrition strategy that included fleet engagements at night to reduce the American advantage in battleships. Such an engagement never occurred in the Pacific War, but the tactics, training, and weapons devised for night battles provided the Japanese with an edge in a series of smaller battles in the early and mid-stages of the war. In spite of their success in most of these early battles, Japanese destroyers took heavy losses. Eleven were sunk in the Guadalcanal campaign and another 25 were lost in the Solomons or Bismarck Sea during 1943. These losses were serious and could not be replaced. In fact, one of the primary reasons cited by the Imperial Navy for its desire to end the Guadalcanal campaign was that mounting destroyer losses would make it impossible to fight the expected decisive battle successfully. The Imperial Navy's destroyer force, so powerful and successful at the beginning of the conflict, was virtually annihilated by the war's end.

ASASHIO CLASS

Design and Construction

The Asashio class, ordered as part of the 1934 Reinforcement Program, became the prototype for the next two classes of Imperial Navy destroyers. Laid down beginning in 1935, the entire class of ten ships was completed between 1937 and 1939. The overall layout of the class proved successful in service and created a powerful ship that also presented a graceful and balanced appearance.

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Asagumo in September 1939. Before the war, all Japanese destroyers displayed their name amidships on the hull and the number of their parent destroyer division forward on the hull. *Asagumo* was the easily the most active and successful Asashio-class unit. (Yamato Museum)

By this time, the Japanese had decided to ignore treaty limitations and built the new class of destroyer to meet requirements set by the Naval General Staff. The London Naval Treaty, which restricted the maximum size of destroyers and the Imperial Navy's overall destroyer tonnage, did not expire until December 31, 1936, but this inconvenience did not trouble the Japanese. Compared to the preceding Shiratsuyu class, the length of the hull was increased by almost 30 feet and displacement was increased by almost 300 tons. The primary difference compared to the previous class, aside from a generally less cramped appearance, was the adoption of a heavier gun armament. The third twin Type C 5in mount was fitted in a superfiring position on the aft deckhouse, as on the Special Type destroyers.

The Asashio class featured improved boilers that operated at higher temperatures. The three boilers drove two turbines and two shafts and generated 50,000 shaft horsepower (shp). This meant that in spite of the greater displacement, the top speed was 35 knots, one knot faster than the preceding Shiratsuyu class. Though the Japanese were happy with the design, there were problems. The sea trials of the lead ship, *Asashio*, produced unsatisfactory steering results. Subsequent ships in the class were provided with a modified stern and improved rudder, which gave a much more compact turning radius. The entire class had problems with the turbines, and it took until the start of the war to modify all ships.

Asashio Class Construction

Ship	Built at	Laid down	Launched	Completed
Arare	Maizuru Navy Yard	03/05/37	11/16/37	04/15/39
Arashio	Kobe by Kawasaki	10/01/35	05/26/37	12/20/37
Asagumo	Kobe by Kawasaki	12/23/36	11/05/37	03/31/38
Asashio	Sasebo Navy Yard	09/07/35	12/16/36	08/31/37
Kasumi	Uraga	12/01/36	11/18/37	06/28/39
Michishio	Osaka by Fujinagata	11/05/35	03/15/37	10/31/37
Minegumo	Osaka by Fujinagata	03/22/36	11/04/37	04/30/38
Natsugumo	Sasebo Navy Yard	07/01/36	05/26/37	02/10/38
Ooshio	Maizuru Navy Yard	08/05/36	04/19/37	10/31/37
Yamagumo	Osaka by Fujinagata	11/04/36	07/24/37	01/15/38

Armament and Service Modifications

The Asashio class was fitted with a heavy armament, greater than almost all foreign contemporaries. The main gun battery was six 5in guns in three Type C twin mounts. The ships' primary offensive punch was the two Type 92 quad torpedo mounts. Each was provided with four reloads, making a total

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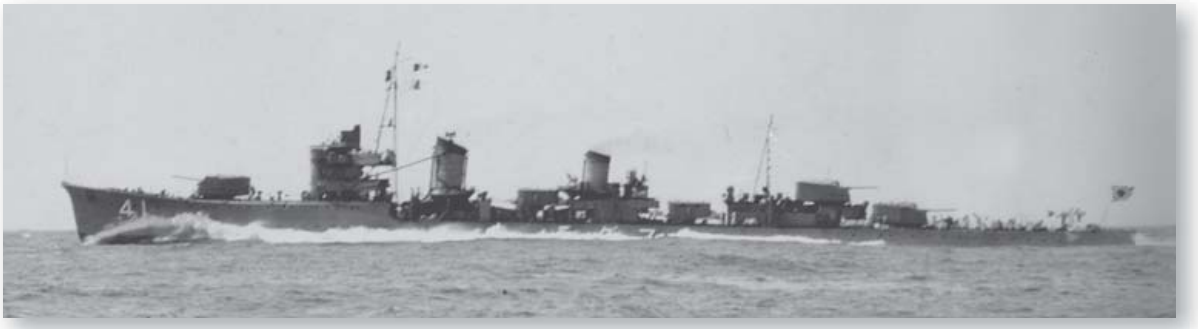

Yamagumo in September 1939. She recorded a long wartime career before being one of three Asashio-class ships sunk in a single night (October 25, 1944) during the Battle of Surigao Strait. From a crew of 240, there were only two survivors. (Yamato Museum)

of 16 embarked torpedoes. The only anti-aircraft weaponry was two Type 96 twin 25mm mounts fitted amidships, forward of the second stack. These were the first destroyers to receive the new Type 96 guns.

As the war progressed, the Japanese were forced to augment the anti-aircraft fit of their destroyers. This was carried out in several stages. The first augmentation, carried out in 1942–43, was to swap the twin mounts amidships with triple mounts and to place a twin 25mm mount on a bandstand forward of the bridge. The second phase, during 1943–44, entailed the removal of the superfiring 5in mount in favor of two 25mm triple mounts. This confirmed the failure of the Japanese 5in guns as anti-aircraft weapons. The third stage, conducted in 1944, was to fit between eight and 12 single 25mm guns on the main and forecastle decks. In addition, *Kasumi* received four single 13mm guns. Only four ships, *Asagumo*, *Kasumi*, *Michishio*, and *Yamagumo*, survived into 1944 to receive the full anti-aircraft augmentation and radar.

Other important changes included the addition of a No. 22 radar on the modified foremast above the bridge and a No. 13 radar on the leading edge of the mainmast aft. The ships began the war with paravanes on the stern for sweeping moored mines and 16 depth charges deployed by either a Type 94 double-sided projector or stern drop stands. Later in the war, the paravanes were removed and the number of depth charges carried was increased. To compensate for this extra topweight, one of the spare sets of reload torpedoes was removed. Nevertheless, total displacement increased to 2,000 tons.

Wartime Service

The ten Asashio-class units began the war assigned to Destroyer Divisions 8 (*Asashio*, *Arashio*, *Michishio*, *Ooshio*), 9 (*Asagumo*, *Minegumo*, *Natsugumo*, *Yamagumo*), and 18 (*Arare*, *Kasumi* and two Kagero-class units). By 1944, only four ships survived, and three of these were moved into Division 4. The class saw heavy action during the war, and none survived.

***Arare*:** The ship began the war assigned to the Pearl Harbor Attack Force and remained with the carriers through the Indian Ocean raid in April. She was assigned to escort the invasion convoy for the Midway operation. In June 1942, she conducted escort operations to Kiska Island in the Aleutians. She was hit by a single torpedo from the submarine USS *Growler* on July 5 that year off Kiska and sunk.

***Arashio*:** She was assigned to support the invasion of Malaya and Dutch East Indies at the start of the war. She escorted the Support Group at the Battle of Midway in 1942, came under air attack, and suffered one bomb hit with 37 dead on June 6. She returned to service in December, conducted

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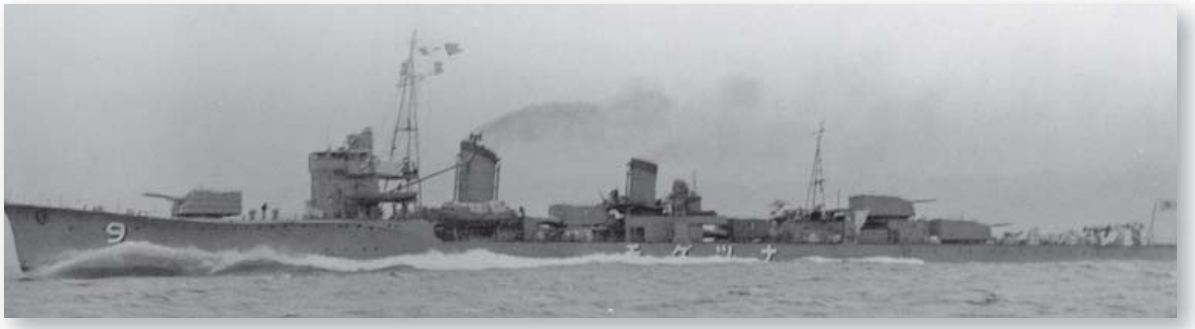

Natsugumo in November 1939. Note the paravanes on the stern for sweeping mines. *Natsugumo* was caught by American aircraft on October 12, 1942 and sunk 90 miles west-northwest of Savo Island, with the loss of 16 crewmen including her commanding officer. (Yamato Museum)

transport runs to New Guinea, and then participated in the evacuation from Guadalcanal. She was lost to air attack on March 4, 1943 in the Battle of the Bismarck Sea.

***Asagumo*:** She was assigned to support the Philippines and Dutch East Indies invasion at the start of the war. During the Battle of the Java Sea, she sank the British destroyer *Electra* on February 27, but was damaged by cruiser gunfire. She was involved in the Midway operation. During the Guadalcanal campaign, she participated in the carrier battles of the Eastern Solomons and Santa Cruz, nine transport runs, and the First Naval Battle of Guadalcanal, where her torpedoes finished off the American destroyer *Laffey*; she was also present at the Second Naval Battle of Guadalcanal. She survived the Battle of Bismarck Sea in March 1943. In May 1943, she moved to northern waters and participated in the evacuation of the Japanese garrison from Kiska. She was involved in the Battle of the Philippine Sea in June 1944. During the Battle of Leyte Gulf, she was assigned to the Southern Force. During the Battle of Surigao Strait on October 25, 1944, the American destroyer *McDermut* fired a single torpedo salvo that sank or crippled three Asashio-class ships, including *Asagumo*. *Asagumo* had her bow blown off and was later sunk by gunfire, with only 39 survivors.

***Asashio*:** She was assigned to support the invasion of Malaya and the Dutch East Indies at the start of the war. On February 19–20, 1942, in the Battle of Badung Strait, she sank the Dutch destroyer *Piet Hein* and later damaged a Dutch cruiser and an American destroyer with gunfire, but was hit and damaged in return. She was assigned to escort the Support Group at the Battle of Midway and came under air attack; she suffered one bomb hit with 22 dead. In October, she was sent to Guadalcanal. She participated in the naval battles of Guadalcanal in November, but was not engaged. She was sent to Japan in January 1943 for a quick refit, and returned to Rabaul in time to escort a large convoy from Rabaul to Lae. During what became known as the Battle of the Bismarck Sea on March 4, 1943, she was pounded by multiple bomb hits; she quickly sank with all hands.

***Kasumi*:** She began the war assigned to the Pearl Harbor Attack Force and remained with the carriers through the Indian Ocean raid in April 1942. She was part of the escort for the invasion convoy in the Midway operation. On July 5, she was hit and damaged by a torpedo from the submarine USS *Growler* off Kiska. She returned to service in June 1943. She survived the Battle of Surigao Strait on October 25, 1944, and then conducted operations in the Philippines area, including two convoys to Leyte. She returned to Japan in February 1945 and was assigned to escort superbattleship *Yamato* on her mission to Okinawa. She was sunk on April 7, 1945 by air attack.

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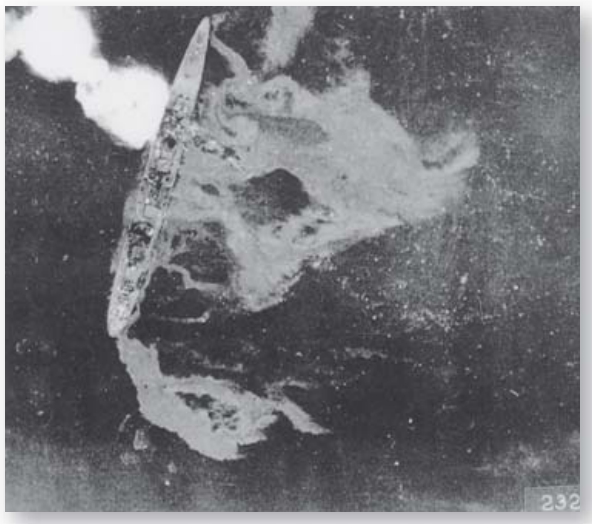
***Michishio*:** She was assigned to support the Philippines and Dutch East Indies invasion at the start of the war. During the Battle of Badung Strait on February 19, 1942, she was surprised by two old American destroyers and heavily damaged by gunfire, being left dead in the water with 64 casualties. After repairs, she arrived in Rabaul in October 1942. After three transport operations, she was heavily damaged by American air attacks on November 14 and eventually towed back to Japan. She participated in the Battle of the Philippine Sea in June 1944. At the Battle of Surigao Strait, on October 25 she was hit by a torpedo from the destroyer *McDermut*; she sank, leaving only four survivors.

***Minegumo*:** She was assigned to support the Philippines and Dutch East Indies invasion at the start of the war. During the Battle of the Java Sea, she and *Asagumo* dueled with British destroyers, sinking one. She participated in the Midway operation. During the Guadalcanal campaign, she was involved in the carrier battle of the Eastern Solomons, but was then damaged by air attack on October 5 and forced to return to Japan. She went back to Rabaul in March 1943, but on her first transport mission to Kolombangara Island in the Central Solomons she was engaged and sunk by radar-controlled gunfire from American cruisers and destroyers in Kula Gulf on March 6.



Arashio leaking oil and drifting after being crippled by air attack during the Battle of the Bismarck Sea. The destroyer was initially disabled on March 3, and finally sank the following day with the loss of 72 crewmen. (Naval History and Heritage Command)

***Natsugumo*:** She was assigned to support the Philippines and Dutch East Indies invasion at the start of the war. She was involved in the Midway operation. During the Guadalcanal campaign, she participated in the Battle of the Eastern Solomons and three transport runs, but was caught by American aircraft on October 12, 1942 near Savo Island and sunk.

***Ooshio*:** She was assigned to support the invasion of Malaya and the Dutch East Indies at the start of the war. On February 19–20, 1942, in the Battle of Badung Strait, she assisted *Asashio* in sinking the Dutch destroyer *Piet Hein*; later she was heavily damaged by gunfire and did not return to action until January 1943, when she participated in the evacuation from Guadalcanal. On February 20, she was torpedoed and sunk by the submarine *Albacore* off New Guinea.

***Yamagumo*:** She participated in the invasion of the Philippines, but struck a mine in Lingayen Gulf on December 31, 1941 and suffered heavy damage. Following repairs, she was assigned to convoy escort duties through early 1944 and sank the American submarine *Sculpin* on November 19, 1943. She participated in the Battle of the Philippine Sea in June 1944. At the Battle of Surigao Strait on October 25, she was struck by three torpedoes from the destroyer USS *McDermut;* she sank in two minutes, leaving two survivors.

Asashio Class Specifications	
Displacement	Standard: 1,961 tons
Dimensions	Length: 388ft overall / Beam: 34ft / Draft: 12ft
Speed	35kts
Range	5,000nm at 18kts
Crew	200 (230 by 1944)

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KAGERO CLASS

Design and Construction

The Kagero class was the first class known as Type A by the Japanese. Building on the success of the preceding Asashio class, the Japanese were very content with the design and capabilities of this new destroyer class. The Kagero class compared favorably to other foreign designs built at the same time. For example, compared to contemporary American destroyers, the Kagero ships had a heavier gun armament (but were not dual-purpose like the American 5in guns) and had a much heavier torpedo armament when their reloads were factored in.

Kagero Class Construction

Ship	Built at	Laid down	Launched	Completed
Akigumo	Uraga	07/20/40	04/11/41	09/27/41
Amatsukaze	Maizuru Navy Yard	12/14/38	10/19/39	10/26/40
Arashi	Maizuru Navy Yard	05/04/39	04/22/40	01/27/41
Hagikaze	Uraga	05/23/39	06/18/40	03/31/41
Hamakaze	Uraga	11/20/39	11/25/40	06/30/41
Hatsukaze	Kobe by Kawasaki	12/03/37	01/24/39	02/15/40
Hayashio	Uraga	06/30/38	04/19/39	08/31/40
Isokaze	Sasebo Navy Yard	11/25/38	06/19/39	11/30/40
Kagero	Maizuru Navy Yard	09/03/37	09/27/38	11/06/39
Kuroshio	Osaka by Fujinagata	08/31/37	10/25/38	01/27/40
Maikaze	Osaka by Fujinagata	04/22/40	03/15/41	07/15/41
Natsushio	Osaka by Fujinagata	12/09/37	02/23/39	08/31/39
Nowaki	Maizuru Navy Yard	11/08/39	09/17/40	04/28/41
Oyashio	Maizuru Navy Yard	03/29/38	11/29/38	08/20/40
Shiranui	Uraga	08/30/37	06/28/38	12/20/39
Tanikaze	Osaka by Fujinagata	10/18/39	11/01/40	04/25/41
Tokitsukaze	Uraga	02/20/39	11/10/39	12/15/40
Urakaze	Osaka by Fujinagata	04/11/39	04/19/40	12/15/40
Yukikaze	Sasebo Navy Yard	08/02/38	03/24/39	01/20/40

A

THE ASASHIO AND KAGERO CLASSES

The Asashio class was the basis for the next two classes of Type A destroyers. The top view is of the lead ship of the class, *Asashio,* as she appeared in 1941. The Asashio class returned to the main battery layout of the Special Type (Fubuki-class) destroyers, with a single twin 5in mount forward and two aft. The two quadruple torpedo launchers amidships constituted the ship's primary offensive power, and both were provided with reloads. The anemic anti-aircraft fit of two twin 25mm mounts can be seen amidships.

The second ship shown in both profile and overhead views is the famous *Yukikaze*. This view is her configuration in April 1945. *Yukikaze* was a Kagero-class ship, but her general appearance was similar to the Asashio class. Like all Japanese destroyers surviving until 1944–45, her appearance was altered by efforts to improve her anti-aircraft capabilities. The superfiring turret aft was replaced by two 25mm triple mounts, a twin 25mm mount added on a bandstand in front of the bridge, and the original twin 25mm mounts were replaced by triple mounts. Fourteen single 25mm guns were added to various spots along the deck edge. The ship's foremast has been modified to allow the placement of a No. 22 radar; the compartment built low on the foremast is the radar room. A No. 13 radar is visible on the mainmast aft. All late-war Asashio and Kagero units were modified in this manner, though the exact number of single mounts varied.

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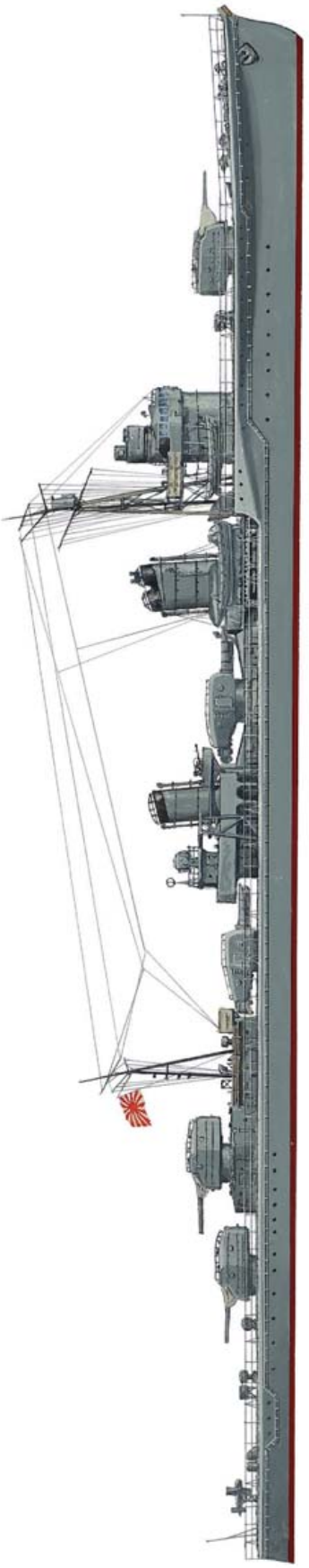

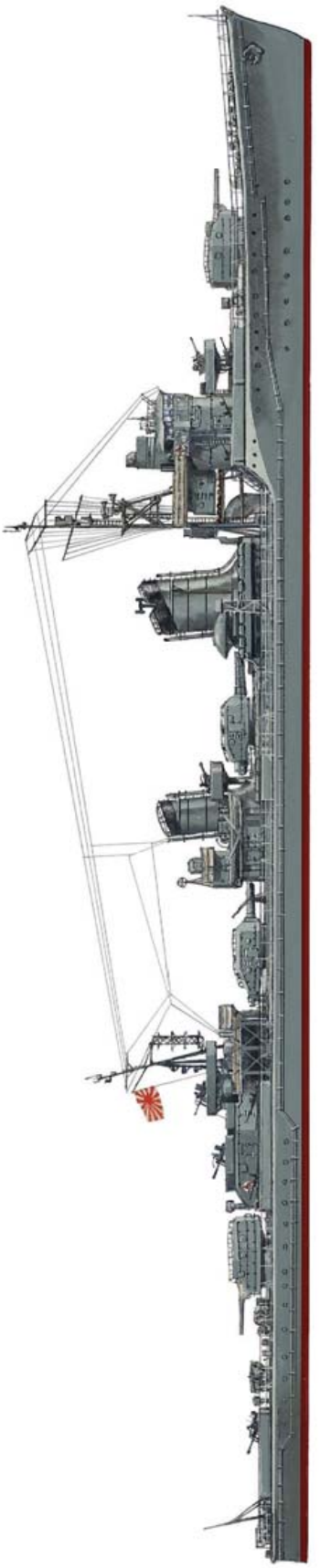

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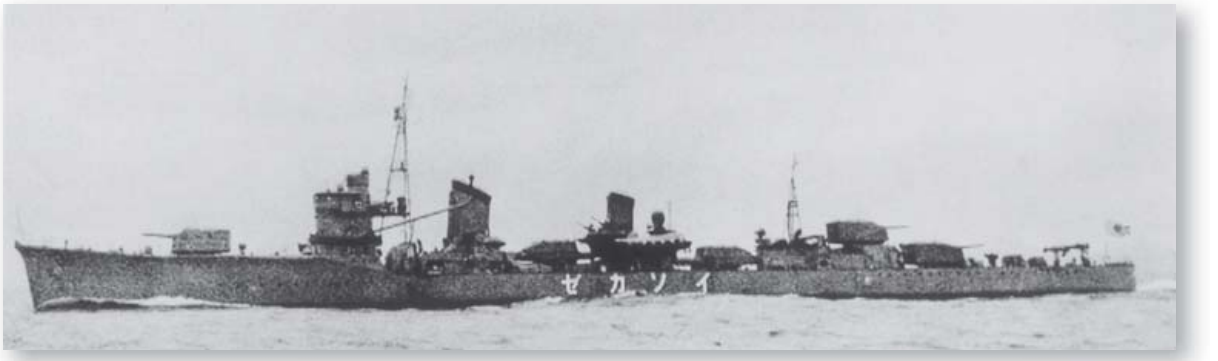

Kagero-class unit *Isokaze* pictured at Sasebo on November 22, 1940, just before her completion. The ship compiled a fine war record and was not sunk until April 1945. (Naval History and Heritage Command)

The first 15 ships of this class were ordered in the 1937 Program. The final four units, sometimes referred to as the *Arashi* group, were ordered as part of the 1939 Program. This brings up an interesting point. Most published histories have only 18 ships in the Kagero class. Recent research in Japan indicates that *Akigumo* was actually one of the last Kagero-class ships built, not one of the first Yugumo-class units. This can be traced to postwar officials trying to make sense out of prewar building plans, which included a number of fictitious destroyers inserted into the plans in an attempt to conceal the extent of the resources devoted to the Yamato-class battleships. The result was the mislabeling of *Akigumo* as a Yugumo-class unit. In fact, she had Type C 5in mounts (not the Type D mounts on the Yugumo class) and had one of these later replaced by 25mm triple mounts (like other Kagero-class units).

As built, the Kagero ships were virtually identical to the preceding Asashio class. The hull was nearly identical, as was the bridge structure. The only major discernable visual difference was the movement of the reload torpedoes for the forward torpedo mount from an abaft position to forward of the launcher.

The Kagero ships possessed a slightly greater displacement and increased beam to improve stability. They demonstrated some increase in boiler efficiency, which produced 52,000shp, but this did not result in any increase in speed. *Amatsukaze* received a new type of experimental boiler that developed higher pressure, but there was no real increase in performance.

Armament and Service Modification

As completed, the arrangement of the armament was identical to the Asashio class. Alterations to the Kagero class were again similar to the Asashio ships, and focused on the augmentation of the anti-aircraft fit and the addition of radar. In 1942–43, the twin 25mm mounts amidships were replaced by triple

Amatsukaze in October 1940, on sea trials before being turned over to the Imperial Navy. This views shows the similarity of the Kagero class to the preceding Asashio class, with the best recognition feature being the torpedo reloads abreast the forward stack. *Amatsukaze* went on to have a distinguished war career. (Yamato Museum)

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Arashi in December 1940 before final completion. This view gives a feel for the speed of these ships, which could be up to 35 knots. *Arashi* was one of the first Kagero-class units to be sunk, succumbing to American destroyers during the Battle of Vella Gulf in August 1943. (Yamato Museum)

mounts and a twin 25mm mount placed forward of the bridge. On all surviving units during 1943–44, the superfiring 5in mount aft was removed and replaced with two 25mm triple mounts. Finally, during the second half of 1944, the seven surviving ships received a number of single 25mm and 13mm guns. This varied from the seven single 25mm guns on *Isokaze* and *Hamakaze* in June 1944 to the 14 25mm and four 13mm guns on *Yukikaze*.

Also during the war, many of the scuttles were welded over to prevent flooding and surviving ships received armor plating around the bridge.

Hamakaze was the first Japanese destroyer to have radar fitted in late 1942 when she returned to Japan for a refit. Since the Kagero ships were front-line units and heavily engaged in the Solomons campaign, they were given priority for receiving radar. Other ships got their radars when they rotated home for repair or refit. At least one ship (*Nowaki*) had the No. 22 radar attached to the foremast without creating a platform, but most had their foremast modified to fit the No. 22. All seven ships still afloat past mid-1944 also received No. 13 radar on the leading edge of the mainmast aft. The Kagero ships began the war with paravanes on the stern and 16 depth charges deployed by either a Type 94 double-sided projector or stern drop stands. With the removal of the paravanes, depth charge stowage was increased to 36 and two rails placed on the stern.

Wartime Service

These ships were at the heart of the Imperial Navy's destroyer force. They constituted several Destroyer Divisions – 4, 15, 16, 17, and half of 18.

***Akigumo*:** The ship began war assigned to Striking Force; she stayed with the carriers through the Battle of Santa Cruz in October 1942. She scuttled the American carrier *Hornet* with torpedoes at Santa Cruz. She participated

Nowaki steaming at high speed during trials in April 1941. The paucity of her anti-aircraft fit is clearly shown in this view, with only the two twin 25mm guns amidships evident. (Yamato Museum)

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This view shows a close-up of *Yukikaze*'s bridge structure in May 1947 after completing repatriation duties. Visible on top of the bridge is the fire-control director and range finder for her main battery. The twin-horned device is the No. 22 radar. Also visible is the covered lookout post higher up on the foremast, which was a feature shared by every Japanese destroyer. (Naval History and Heritage Command)

in the evacuation from Guadalcanal in February 1943. She was active in the Solomons in early 1943 before participating in the successful evacuation from Kiska in July. She returned to the Solomons and participated in the Battle of Vella Lavella in October. She was sunk by the submarine USS *Redfin* on April 11, 1944 off the Philippines.

***Amatsukaze*:** She participated in the invasion of the southern Philippines at the start of the war. She was assigned to support the invasion of the Dutch East Indies and participated in the Battle of the Java Sea on February 27, 1942. She was involved in the Midway operation as escort to the invasion convoy. During the Guadalcanal campaign, she participated in the battles of Eastern Solomons and Santa Cruz; during the first naval battle of Guadalcanal on November 13, she sank the American destroyer *Barton* with torpedoes, but then was damaged by cruiser gunfire and forced to return to Japan for repairs. She was assigned to general escort duties and torpedoed by the submarine *Redfish* on January 16, 1944 in the South China Sea; she lost her bow and suffered 80 dead. She was repaired at Singapore and was sunk on April 6, 1945 by B-25s near Amoy, China.

***Arashi*:** The ship began the war as part of the Malaya and Dutch East Indies invasion forces. In March 1942, she assisted in sinking several Allied ships fleeing Java, including a British destroyer and an American gunboat. She participated in the Midway operation as part of Striking Force. She moved to the South Pacific and engaged in several transport missions to Guadalcanal and points on New Guinea. She participated in the Battle of Santa Cruz and later the Battle of Vella Gulf on August 7, 1943, and was one of three Japanese destroyers surprised by American destroyers and sunk by torpedoes and gunfire.

***Hagikaze*:** She was assigned to support the invasion of Malaya at the start of the war, then assigned to escort Striking Force and participated in the Midway operation. She began operations off Guadalcanal in August 1942 and was heavily damaged by a B-17 on August 19. She re-entered service in February 1943 and was assigned to support operations in the Solomons. After several supply missions beginning in April, she participated in the Battle of Vella Gulf on August 7 and was sunk by torpedoes and gunfire.

***Hamakaze*:** She was assigned to escort Striking Force at the start of the war and remained with carriers through Midway operation. She participated in the Battle of Santa Cruz, four missions to Guadalcanal, and the evacuation from the island in February 1943. She was heavily engaged during the remainder of the Solomons campaign, being present at the battles of Kula Gulf and Kolombangara in July 1943 and the battle off Horaniu in August. She was damaged by air attack on August 26 and forced to return to Japan.

B

KAGERO AT PEARL HARBOR

This view shows *Kagero*, lead ship of her class, steaming through heavy seas on December 7, 1941. *Kagero* was assigned as part of the Pearl Harbor Striking Force. Seven of the nine destroyers assigned to the raid were Kagero-class units, since at the beginning of the war these were the most modern destroyers in the Imperial Navy. *Kagero* is in her early war configuration. The presence of the torpedo reloads abreast the forward stack indicates she is a Kagero-class unit, as opposed to the almost identical Asashio class.

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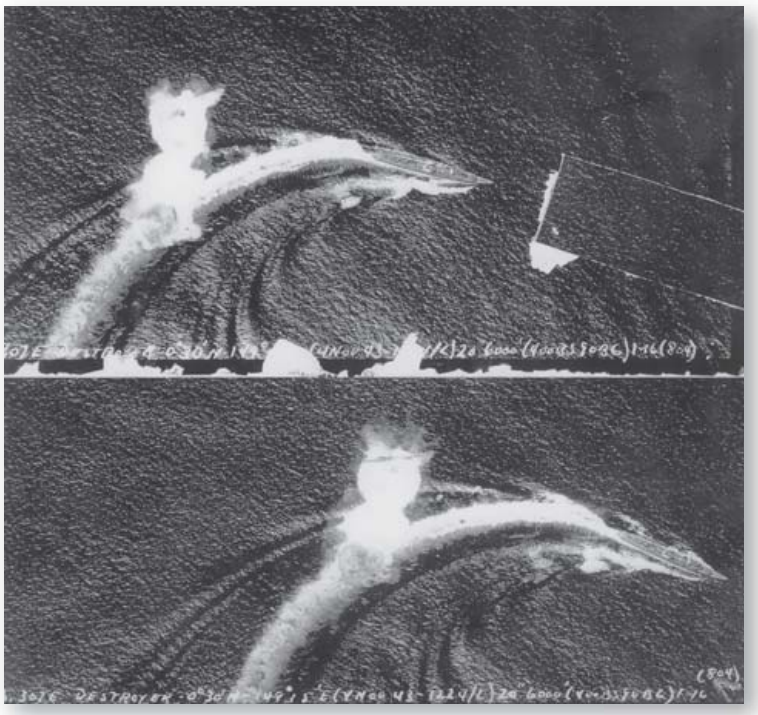

Isokaze maneuvering at full speed to avoid air attacks on November 4, 1943. The ship was not damaged on this occasion, but struck a mine later that day and was forced to return to Japan. Note the ship is in its mid-war configuration, since the superfiring turret is still present. (Naval History and Heritage Command)

She participated in the Battle of the Philippine Sea. She was assigned to the First Diversionary Attack Force (also known as the Center Force) for the Leyte operation and was slightly damaged by air attack. In April 1945, she was assigned to escort *Yamato*. She was sunk by air attack on April 7.

***Hatsukaze*:** She was assigned to support the invasion of the southern Philippines at the start of the war. She participated in the invasion of the Dutch East Indies and also in the Battle of the Java Sea on February 27, 1942. She was involved in the Midway operation as escort to the invasion convoy. She participated in the battles of the Eastern Solomons and Santa Cruz. She was hit by a PT-launched torpedo off Guadalcanal on January 10, 1943 and forced to return to Japan. She was sunk with all hands during the Battle of Empress Augusta Bay on November 2, 1943 after a collision with the heavy cruiser *Myoko* and was then destroyed by American destroyer gunfire.

***Hayashio*:** The ship began the war assigned to the Philippine and Dutch East Indies invasion forces. She was involved in the Midway operation as part of the invasion force. During the Guadalcanal campaign, she participated in the battles of the Eastern Solomons and Santa Cruz, three transport missions to the island, the mid-October bombardment of Henderson Field, and the unsuccessful mid-November convoy to that island. She was sunk by air attack on November 24, 1943 off Lae, New Guinea.

***Isokaze*:** She was assigned to escort Striking Force at the start of the war and remained with carriers through the Midway operation. During the Guadalcanal campaign, she participated in the battles of the Eastern Solomons and Santa Cruz and the February 1943 evacuation. On August 18, she was involved in the indecisive battle off Horaniu against four American destroyers in the Central Solomons. On October 6, 1943, she participated in the Battle of Vella Lavella. She was damaged by a mine on November 4 off Kavieng and forced to return to Japan for repairs. She participated in the Battle of the Philippine Sea. She was assigned to the First Diversionary Attack Force for the Leyte operation; she returned to Japan in November and was assigned to escort *Yamato*. She was damaged by air attack on April 7, 1944 and later scuttled.

***Kagero*:** She was assigned to escort Striking Force at the start of the war and remained with carriers through the Indian Ocean raid in April 1942. She participated in the Midway operation as part of the invasion convoy. She moved to the South Pacific and was involved in the Battle of the Eastern Solomons, ten transport/attack missions to Guadalcanal, and the Battle of

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Santa Cruz. She was present at the second naval battle of Guadalcanal in mid-November and the Battle of Tassafaronga on November 30, 1942. She conducted another four supply runs to Guadalcanal and supported the February 1943 evacuation. After a brief refit in Japan, she returned to the Solomons, was damaged by a mine on May 8 off Kolombangara and then finished off by air attack.

***Kuroshio*:** The ship began the war supporting the invasion of the southern Philippines and then participated in the invasion of the Dutch East Indies. She was involved in the Midway operation as part of the invasion convoy. She moved to the South Pacific and participated in the Battle of the Eastern Solomons, three transport missions to Guadalcanal, the mid-October bombardment of Henderson Field, and the Battle of Santa Cruz. At Tassafaronga, her torpedoes may have been among those that crippled the heavy cruiser USS *Pensacola*. From December until February 1943, she participated in seven supply runs and all three evacuation runs to Guadalcanal. After a brief refit in Japan, she returned to the Solomons and was sunk by a mine on May 8 off Kolombangara.

***Maikaze*:** She began the war as part of the Malaya and Dutch East Indies invasion forces. In February 1942, she was assigned to escort Striking Force and stayed with the carriers throughout the Midway operation, the Eastern Solomons and Santa Cruz. She participated in the evacuation from Guadalcanal and was damaged by air attack. After repairs, she was assigned to general escort duties. She was caught at Truk during an American carrier attack in February 1944 and sunk by cruiser gunfire northwest of Truk with all hands.

***Natsushio*:** The ship was assigned to the southern Philippine invasion force at the start of the war. She became the first of 39 Japanese destroyers to be sunk by submarine attack when she was torpedoed off Makassar in the Dutch East Indies on February 8 by the American submarine USS *S-37*; she sank the next day.

***Nowaki*:** She began the war as part of the Malaya and Dutch East Indies invasion forces. In March 1942, she assisted in the sinking of several Allied ships departing Java. She participated in the Midway operation as part of the Striking Force; she stayed with the carriers for the Eastern Solomons and later was present at Santa Cruz. She was involved in at least four supply missions to Guadalcanal; during the last, on December 7, 1942, she suffered moderate damage from air attack and was forced to return to Japan for repairs. She was caught at Truk during an American carrier attack in February 1944, but was the only Japanese ship to escape from an American surface task group that included the battleships *Iowa* and *New Jersey*. She participated in

Nowaki in August 1943, probably at Yokosuka. The condition of her external paint speaks of her active and near continual service up to this point in the war. The cable running along the side of her hull is a degaussing cable designed to reduce her vulnerability to magnetic mines. The ship has already received her mid-war modifications as evidenced by the twin 25mm gun in front of the bridge and the triple 25mm mount amidships. (Yamato Museum)

Shiranui in April 1942, probably during the raid into the Indian Ocean when the ship was assigned carrier escort duties. The destroyer is preparing to conduct underway refueling. The position of the forward torpedo reloads is evident, marking her as a Kagero-class unit. (Yamato Museum)

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Tanikaze in April 1941 following her completion. The ship survived until mid-1944 before being sunk by an American submarine. Of her crew of 240, 114 were killed. (Yamato Museum)

the Philippine Sea operation. She was assigned to the First Diversionary Attack Force for the Leyte operation and sunk by cruiser and destroyer gunfire off San Bernardino Strait on October 26, 1944 with the loss of approximately 1,000 men – the entire crew of the destroyer and the rescued survivors from the heavy cruiser *Chikuma*.

***Oyashio*:** She was assigned to the southern Philippine invasion force at the start of the war, and then was active in the invasion of the Dutch East Indies. She participated in the Midway operation as escort to the invasion convoy. She was involved in the Battle of the Eastern Solomons, led three transport missions to Guadalcanal, and then participated in the battleship bombardment of Henderson Field in mid-October 1942. She participated in the Battle of Santa Cruz in October. In November, she engaged in the second naval battle of Guadalcanal. On November 30, she played a key role in the Battle of Tassafaronga, when she possibly torpedoed the heavy cruiser *Pensacola* and more likely torpedoed the heavy cruiser *Northampton*, which later sank. She conducted several more supply missions to Guadalcanal before arriving in Japan for refit. Upon her return to the Solomons, she struck a mine off Kolombangara, and was then sunk by air attack on May 8, 1943.

***Shiranui*:** The ship was assigned to escort Striking Force at the start of the war and remained with the carriers through the Indian Ocean raid in April 1942. She participated in the Midway operation as escort to the invasion convoy. She was heavily damaged by the submarine USS *Growler* on July 5 off Kiska. Repairs were not completed until November 1943, after which she was assigned to general escort duties. She participated in the Leyte operation as part of the Second Diversionary Attack Force and fought at the Battle of Surigao Strait. She was sunk by American escort carrier aircraft on October 27, 1944 with all hands.

***Tanikaze*:** She was assigned to escort Striking Force at the start of the war; she stayed with carriers through the Midway operation, during which she was slightly damaged. She participated in the Battle of Santa Cruz and then undertook supply missions in December–February 1943, including the evacuation of Guadalcanal. In July 1943, she participated in the Battle of Kula Gulf and contributed to the torpedo barrage that sank the light cruiser USS *Helena*. She was assigned to general escort duties until sunk by the submarine USS *Harder* near Tawi Tawi on June 9, 1944.

***Tokitsukaze*:** She participated in the invasion of the southern Philippines at the start of the war. She was assigned to support the invasion of the Dutch East Indies, participated in the Battle of the Java Sea on February 27, 1942,

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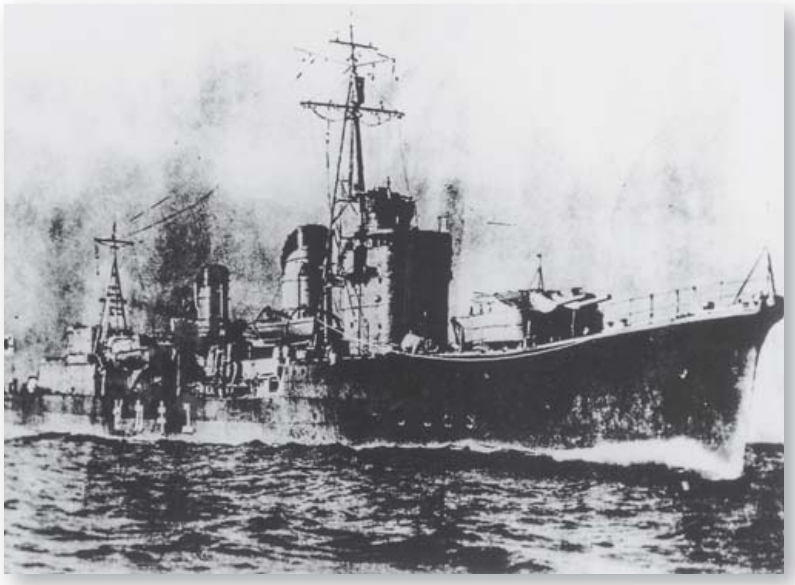
and in the Midway operation as escort to the invasion convoy. During the Guadalcanal campaign, she was involved in the battles of the Eastern Solomons and Santa Cruz. In January–February 1943, she was active in several supply and then evacuation missions to Guadalcanal. She was sunk by air attack on March 4 during the Battle of the Bismarck Sea.

***Urakaze*:** She was assigned to escort Striking Force at the start of the war and remained with carriers throughout the Midway operation. She participated in the Battle of Santa Cruz and six missions to Guadalcanal and New Guinea through 1942. In 1943, she was involved in the evacuation from Guadalcanal and later undertook general escort duties, including several convoys to New Guinea. She participated in the Battle of the Philippine Sea. She was assigned to the First Diversionary Attack Force for the Leyte operation and was slightly damaged by air attack. She was sunk by the submarine USS *Sealion* on November 21, 1944 off Formosa with all hands.

***Yukikaze*:** The most famous ship of the Kagero-class destroyers and perhaps any Japanese Pacific War destroyer, *Yukikaze* began the war attached to the southern Philippines invasion force. She participated in the invasion of the Dutch East Indies, including the Battle of the Java Sea. She was involved in the Midway operation as part of the invasion convoy. She arrived in the South Pacific in time for the battle of Santa Cruz and then was heavily engaged during the first naval battle of Guadalcanal, during which she was only lightly damaged. She participated in all three evacuation runs from Guadalcanal in February 1943, and survived the Battle of Bismarck Sea in March. She was engaged in the Battle of Kolombangara in July and assisted in the torpedoing of three American ships. She was present at the Battle of the Philippine Sea in June 1944. She was assigned to the First Diversionary Attack Force for the Leyte operation and emerged unscathed. She escorted *Yamato* in April 1945 and suffered only light damage on April 7 when *Yamato* was sunk. She survived the war to be turned over to the Nationalist Chinese in 1947, and remained in service until 1966. She was finally scrapped in 1970 after a campaign to return her to Japan failed.



Yukikaze, shown here in January 1940 off Sasebo after completion, was the most famous Japanese destroyer of the war. She fought in every major battle or campaign and survived the war. After being turned over to the Nationalist Chinese, she was rearmed with American weapons and continued to serve until 1970. (Naval History and Heritage Command)

Kagero Class Specifications	
Displacement	Standard: 2,033 tons
Dimensions	Length: 388ft 6in overall / Beam: 35ft 6in / Draft: 12ft 4in
Speed	35kts
Range	5,000nm at 18kts
Crew	240

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Makigumo in March 1942 after completion. The Yugumo-class unit can be distinguished from early classes by the forward slope of the bridge structure, which is evident in this view. The ship had a brief career, being sunk in February 1943 by mines, but 237 of her crew were saved before the ship was scuttled by torpedoes from *Yugumo*. (Yamato Museum)

YUGUMO CLASS

Design and Construction

The Yugumo class was the ultimate refinement of the Special Type destroyer dating back to 1928. Essentially, the class was a repeat of the Kagero ships with a few minor improvements. The basic layout was unchanged, but displacement rose by some 45 tons and the hull was extended by a few feet.

The first 11 ships of the class were ordered as part of the 1939 Program. Another 16 ships (referred to by the Japanese as the *Hamanami* group) were ordered as part of the 1941 Program, but of these eight were canceled before being started. Another eight ships were planned for the Modified 1942 Program, but these were also canceled.

Yugumo Class Construction

Ship	Built at	Laid down	Launched	Completed
Akishimo	Osaka by Fujinagata	05/03/43	12/05/43	03/11/44
Asashimo	Osaka by Fujinagata	01/21/43	07/18/43	11/27/43
Fujinami	Osaka by Fujinagata	08/25/42	04/20/43	07/31/43
Hamanami	Maizuru Navy Yard	04/28/42	04/18/43	10/15/43
Hayanami	Maizuru Navy Yard	01/15/42	12/19/42	07/31/43
Hayashimo	Maizuru Navy Yard	–	–/11/43	02/20/44
Kazegumo	Uraga	12/23/40	09/26/41	03/28/42
Kishinami	Uraga	08/29/42	08/19/43	12/03/43
Kiyonami	Uraga	10/15/41	08/17/42	01/25/43
Kiyoshimo	Uraga	03/16/43	02/29/44	05/16/44
Makigumo	Osaka by Fujinagata	12/23/40	11/05/41	03/14/42
Makinami	Maizuru Navy Yard	04/11/41	12/17/41	08/18/42
Naganami	Osaka by Fujinagata	04/05/41	03/05/42	06/30/42
Okinami	Maizuru Navy Yard	08/15/42	07/18/43	12/10/43
Onami	Osaka by Fujinagata	11/15/41	08/31/42	12/29/42
Suzunami	Uraga	03/27/42	03/12/43	07/27/43
Takanami	Uraga	05/29/41	03/16/42	08/31/42
Tamanami	Osaka by Fujinagata	03/16/42	12/20/42	03/30/43
Yugumo	Maizuru Navy Yard	06/12/40	03/16/41	12/05/41

The primary difference in appearance from the Kagero class was the shape of the bridge structure. On the Yugumo class, there was a forward slope on the front of the bridge structure, which was meant to reduce wind

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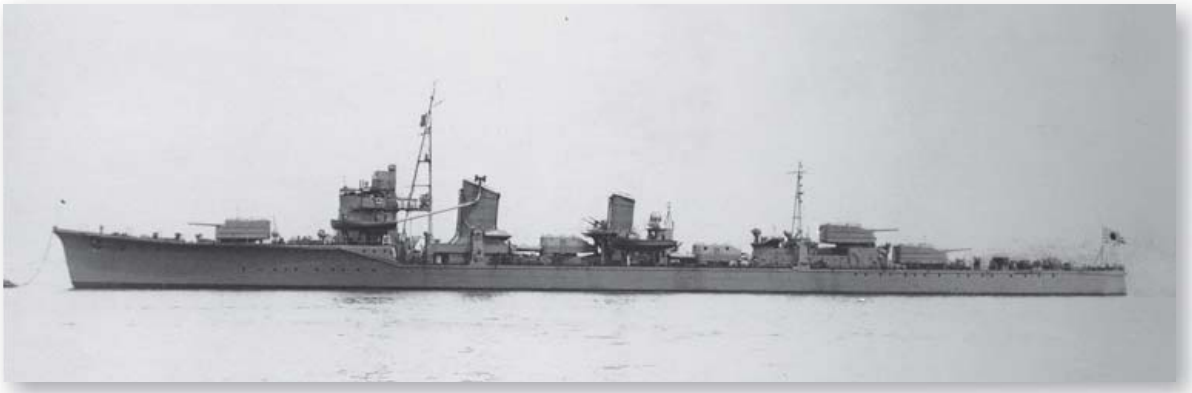

This excellent view of *Naganami* dates from June 1942. Without noting the forward slope of the bridge structure, it is nearly impossible to distinguish her from a Kagero-class unit. The ship was active until November 1944 when she was sunk by air attack off Leyte and suffered 156 dead. (Yamato Museum)

resistance and improve stability. Unlike the Kagero class, which was built in a standard fashion, the Yugumo class was built in three different yards and there were several minor differences between ships. There were actually three variants of the bridge structure (early, mid, and late production), two variants to the mainmast, and placement of the degaussing cable was evident in five different patterns depending on where the ship was built.

Armament and Service Modification

The major difference in armament was the adoption of a new 5in twin mount known as Type D. This mount was capable of a maximum elevation of 75 degrees, making it more suitable for anti-aircraft work. This is why units of the Yugumo class never had one of their aft 5in mounts removed in favor of additional 25mm mounts to increase anti-aircraft protection. Though the increased elevation did make the Yugumo ships' 5in battery nominally capable of anti-aircraft work, in fact the Type D was a poor dual-purpose mount, since it possessed slow elevation and tracking speeds and was unable to sustain high rates of fire.

As with the Asashio- and Kagero-class ships, as the war progressed, the anti-aircraft fit of the Yugumo units was increased. Early units carried only two twin 25mm mounts forward of the aft stack. Surviving units and those completed later in the war had these replaced by two triple mounts and had a twin mount added forward of the bridge structure. Units surviving into 1944 had a second set of 25mm triple mounts added on a platform abaft the forward stack. Additionally, the six units surviving into 1944 received up to 12 single 25mm guns. *Kiyoshimo* also received a small number of single 13mm guns.

Other important changes included the addition in 1943 of No. 22 radar on the modified foremast. *Naganami* had her foremast modified to provide a platform for the radar. By 1944, surviving ships also received No. 13 radar usually mounted on the mainmast. However, *Kiyoshimo* had her No. 13 placed on the foremast above the No. 22 set. These ships began the war with paravanes on the stern, and a Type 94 double-sided projector and drop stands to deploy depth charges. Later in the war, the paravanes were removed and the number of depth charges carried was increased.

Wartime Service

Yugumo-class ships were assigned to Destroyer Divisions 2, 10, 31, and 32. These were considered elite units and were always assigned to escort primary fleet units.

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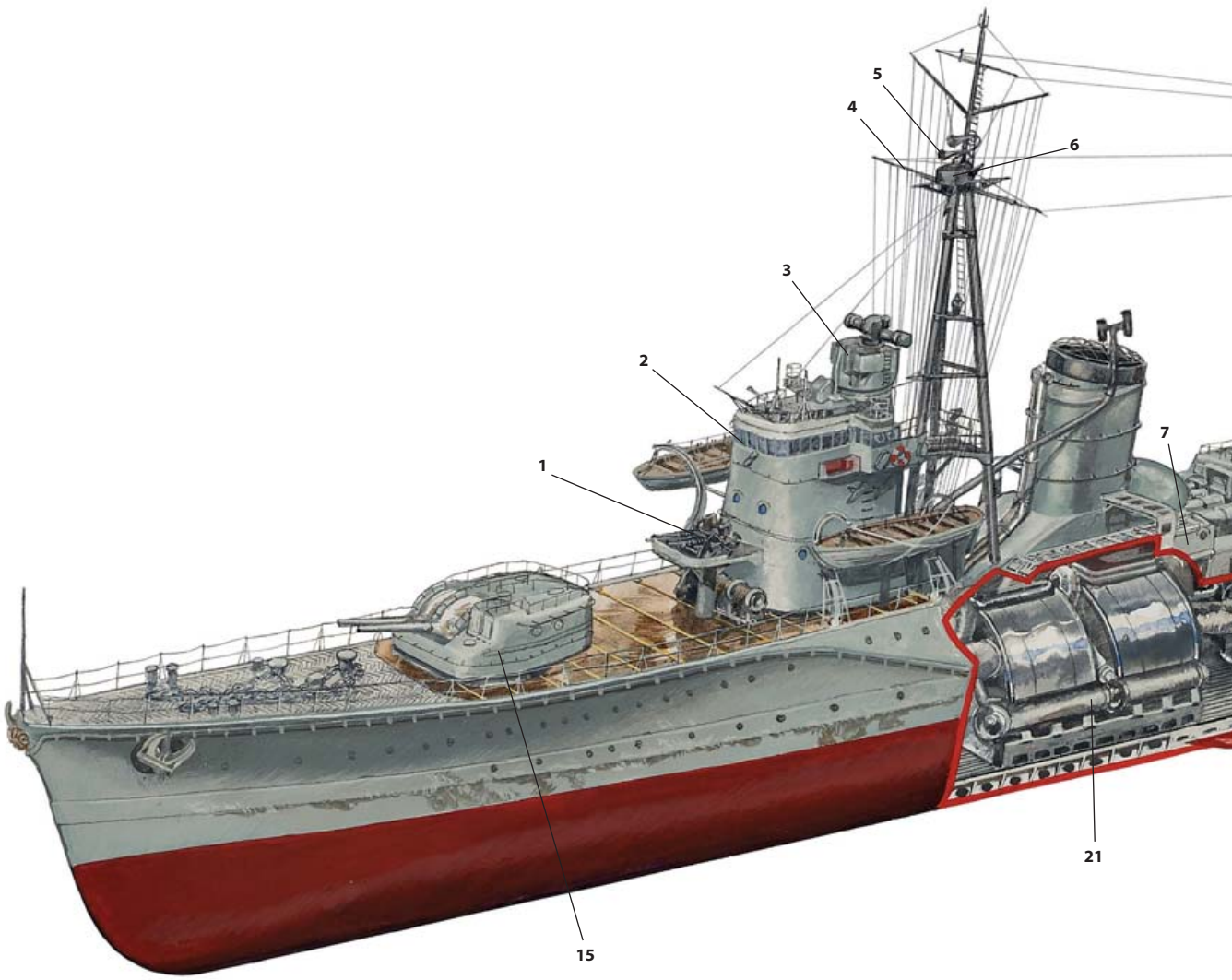
YUGUMO, OCTOBER 1943, AT THE BATTLE OF VELLA LAVELLA

The 19-unit Yugumo class was essentially a repeat of the Kagero class. The only major difference was the shape of the bridge structure. The forward slope of *Yugumo*'s bridge structure is evident in this view (Asashio and Kagero units had no slope). *Yugumo* has received some mid-war modifications. The amidships 25mm twin guns have been replaced by triple mounts, and a bandstand has been constructed forward of the bridge for a twin 25mm mount. This configuration was typical of all mid-war Yugumo-class ships and was the final configuration for *Yugumo* before she was lost.



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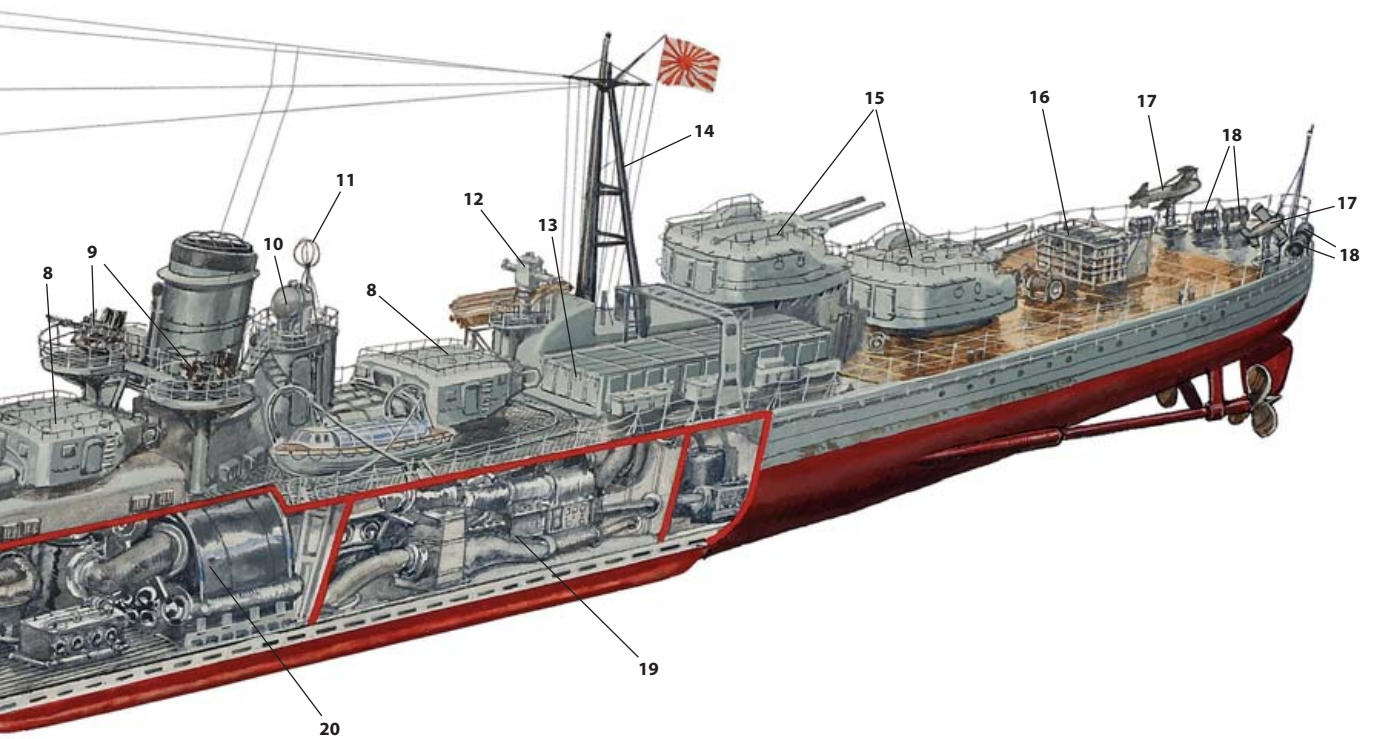

KEY

1. Type 96 twin mount
2. Compass bridge
3. Main battery fire-control director and range finder
4. Foremast
5. No. 22 Radar
6. Lookout post
7. Reloads for forward torpedo mount
8. Type 92 triple torpedo launcher (3)
9. Type 96 triple mount (2)
10. 90cm searchlight
11. Radio direction finder
12. Type 14 2-meter range finder check
13. Reloads for aft torpedo mount
14. Mainmast
15. Type D 5in gun mount (3)
16. Type 94 depth charge projector
17. Paravane (2)
18. Drop stands for depth charges
19. Machinery room
20. Aft boiler room
21. Forward boiler room

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Asashimo on November 27, 1943, the day of her formal completion. The ship was completed with the pair of 25mm triple mounts abaft the forward stack. (Yamato Museum)

***Akishimo*:** She joined the fleet in May 1944. She participated in the Battle of the Philippine Sea. In October, she was involved in the Battle of Leyte Gulf as part of the First Diversionary Attack Force, but played no role since she was assigned responsibility for picking up survivors and escorting cripples. She was sent to Manila in November to escort convoys to Leyte. During these operations, she suffered heavy damage from air attack on November 10 and was forced to return to Manila, where she was hit again by bombs on November 13 and sank the following day.

***Asashimo*:** The ship joined fleet in February 1944 and participated in the sinking of the American submarine *Trout* on February 29. She was involved in the Battle of the Philippine Sea in June. She participated in the Battle of Leyte Gulf as part of the First Diversionary Attack Force, but played no role as she was assigned to escort the heavy cruiser *Takao* back to Singapore. She undertook two convoys to Leyte in November, surviving heavy air attack. She participated in the San Jose bombardment operation in December. She returned to Japan and was assigned to escort *Yamato* to Okinawa in April. She was sunk by an air attack with no survivors on April 7, 1945.

Hayanami pictured on July 24, 1943, just before her final completion. The ship is in her mid-war configuration with the twin 25mm mount in front of the bridge, two triple 25mm mounts amidships, and a No. 22 radar. After a career of less than a year, *Hayanami* blew up and sank after being torpedoed by a submarine east of Borneo on June 7; 208 crewmen were killed. (Yamato Museum)

***Fujinami*:** She began fleet operations in October 1943. She was struck by a dud torpedo on November 5 in Rabaul in an American carrier air attack. She conducted general escort operations in the Central Pacific until March 1944. She participated in the Battle of the Philippine Sea. She was assigned to the First Diversionary Attack Force for the Leyte operation. She suffered minor damage on October 24 in the Sibuyan Sea and the following day in the action off Samar. She scuttled the heavy cruiser *Chokai* during this action and rescued survivors. She was sunk by carrier air attack on October 27 and lost with all hands.

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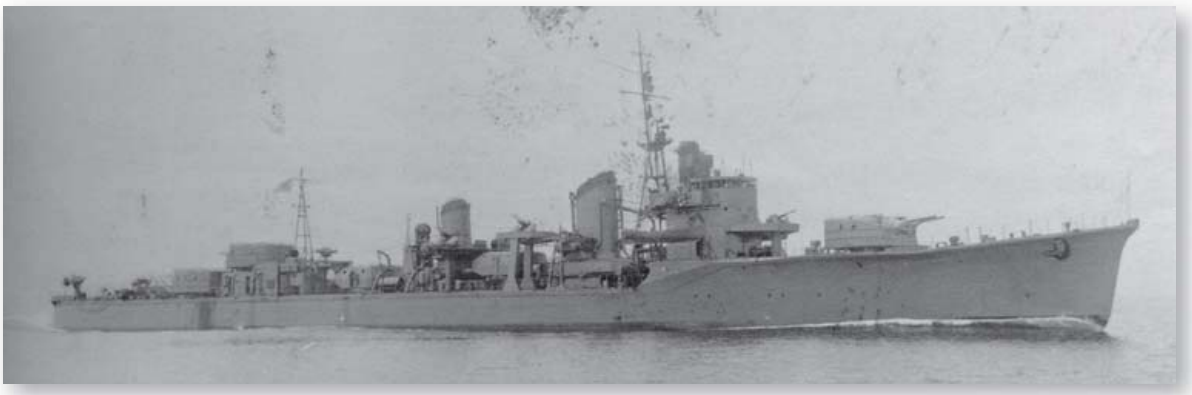

Kiyoshimo on the day before her formal completion on May 15, 1944. The ship shows a late-war configuration, with a No. 22 radar on the foremast and one twin and four triple 25mm mounts. However, the No. 13 radar has not yet been fitted nor have any 25mm single guns. Note the paravanes on the fantail. (Yamato Museum)

***Hamanani*:** She began fleet service in December 1943. She participated in the Battle of the Philippine Sea. She was assigned to the First Diversionary Attack Force for the Leyte operation but played no significant role in the October 25 action off Samar. She escorted troop convoys from Manila to Leyte and was sunk by American carrier aircraft in Ormoc Bay on November 11.

***Hayanami*:** She commenced fleet operations in October 1943 and ventured as far south as Bougainville. She conducted general escort operations through June 1944 before being torpedoed and sunk by American submarine USS *Harder* on June 7 east of Borneo, with no survivors.

***Hayashimo*:** She joined the fleet in May 1944. She participated in the Battle of the Philippine Sea. In October, she was involved in the Battle of Leyte Gulf as part of the First Diversionary Attack Force and was struck by a carrier aircraft-launched torpedo on October 26, settling in shallow water southeast of Mindoro. She was ultimately abandoned on November 12 after salvage efforts failed.

***Kazegumo*:** Her first action was the Midway operation, during which she was assigned to the Striking Force. She remained with the carriers for the battles of the Eastern Solomons and Santa Cruz during the Guadalcanal campaign. She conducted several missions to Guadalcanal, including the unsuccessful bombardment of Henderson Field on November 14. In February 1943, she participated in two of three evacuation missions to Guadalcanal. She was active in operations in the central Solomons and forced to return to Japan in April after mine damage. She participated in the July evacuation of Kiska. She returned to the Solomons in September and took part in the Battle of Vella Lavella on October 6–7 against American destroyers. In June 1944, she was assigned to take part in an abortive operation to move troops to Biak. She was sunk by the submarine USS *Hake* off Davao on June 8.

***Kishinami*:** She was fully operational in February 1944. On February 29, she assisted in the sinking of the American submarine USS *Trout*. She participated in the Battle of the Philippine Sea. She was assigned to the First Diversionary Attack Force for the Leyte operation and was damaged by air attack. She docked in Singapore in early November to repair damage from grounding. She was sunk by the American submarine USS *Flasher* on December 4, 1944, west of Palawan Island in the Philippines.

Asashimo was one of the four destroyers sunk during *Yamato's* final sortie in April 1945. The destroyer fell behind the main formation due to engine trouble and was sunk with all hands. She is shown here after several bomb hits, afire, leaking oil, and dead in the water. (Naval History and Heritage Command)

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The wreck of *Hayashimo* after being grounded 40 miles southeast of Mindoro. The ship was damaged by air attack on October 25 and then torpedoed by aircraft the following day. Salvage attempts failed and the ship was abandoned on November 12. (Naval History and Heritage Command)

***Kiyonami*:** She began operations in February 1943, performing general escort duties through June. On July 13, she participated in the Battle of Kolombangara, during which Japanese destroyer torpedoes crippled three Allied light cruisers and sank a destroyer. On July 20, while on a transport mission to Kolombangara, she was sunk by US Army Air Force B-25s with only a single crewman surviving.

***Kiyoshimo*:** She joined the fleet in June 1944 and participated in the Battle of Leyte Gulf as part of the First Diversionary Attack Force. She was damaged in the Sibuyan Sea by air attack on October 24 and forced to return to Singapore for repairs. She was assigned to take part in the bombardment of the Allied beachhead at San Jose, where she was hit by two bombs from aircraft and finished off by PT boats on December 26, 1944.

***Makigumo*:** She was assigned to escort the Striking Force during the Midway operation and remained with the carriers during the Battle of the Eastern Solomons in August 1942. She conducted three transport runs to Guadalcanal in October and then participated in the Battle of Santa Cruz; during the battle she scuttled the crippled American carrier USS *Hornet*. She was involved in the unsuccessful bombardment of Henderson Field on November 14. Following a brief period in Japan for repairs, she participated in the first evacuation mission from Guadalcanal on February 1, 1943. She was sunk by a mine while trying to avoid an American PT boat attack, but almost all of the crew was saved.

***Makinami*:** She was operational in September 1942 and immediately sent to support operations off Guadalcanal. She participated in two bombardments of Henderson Field in October and later took part in the Battle of Santa Cruz. In November, she escorted the unsuccessful troop convoy bound for Guadalcanal. On November 30, she participated in the Battle of Tassafaronga but did not launch any torpedoes because her decks were loaded with supply drums. She conducted three more supply runs to Guadalcanal and then led the first evacuation run to the island on February 1, 1943, during which she was damaged by air attack. In November 1943, she conducted a troop transport mission to Bougainville. She was sunk by American destroyer torpedoes and gunfire on November 25 during the Battle of Cape St George.

***Naganami*:** She began fleet operations in September 1942 and was immediately sent to support operations off Guadalcanal. She participated in two bombardments of Henderson Field in October and later took part in the Battle of Santa Cruz. In November, she conducted a transport run to the island, during which she was damaged by air attack, and later she escorted an

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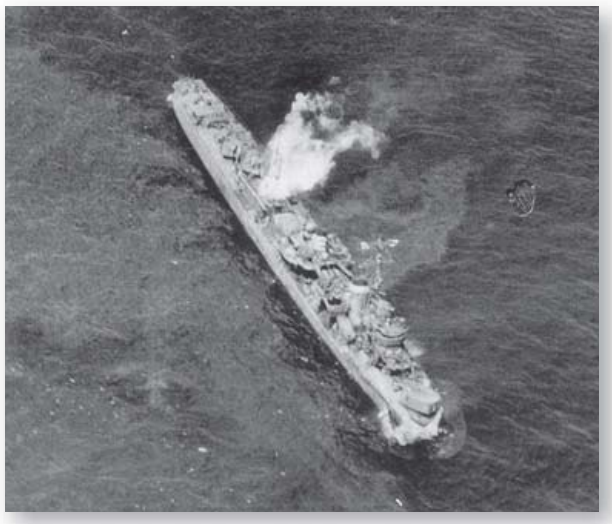
ill-fated troop convoy to the island in mid-November. On November 30, she participated in the Battle of Tassafaronga and was undamaged. She conducted three more supply runs to Guadalcanal into January 1943. Following a refit in Japan, she participated in the successful July 1943 evacuation from Kiska. She was involved in the Battle of Empress Augusta Bay on November 2, 1943; on November 11, she was heavily damaged by aircraft torpedo in Rabaul harbor and forced to return to Japan for repairs. Upon her return to service, she was assigned to the First Diversionary Attack Force for the Leyte operation, but missed most of the battle after being assigned to escort the damaged heavy cruiser *Takao* to Singapore. In November, she was assigned to escort a convoy from Manila to Leyte, and was sunk by carrier air attack on November 11 in Ormoc Bay with heavy loss of life.



Another Yugumo-class unit lost to air attack during the Philippines campaign was *Naganami*. She is shown here on November 11, 1944 in Ormoc Bay dead in the water, afire, and with her bow missing. Only 72 of her crew of 228 survived the attack. The ship is in a late-war configuration with pairs of 25mm mounts evident around both stacks. (Naval History and Heritage Command)

***Okinami*:** She was fully operational in February 1944. She was temporarily assigned to the Biak transport operation in June before participating in the Battle of the Philippine Sea. She was part of the First Diversionary Attack Force for the Leyte operation and suffered minor damage from air attack. She escorted a convoy from Manila to Leyte in early November, and then was damaged by air attack at Manila on November 5. She was sunk on November 13 by air attack in Manila Harbor.

***Onami*:** She entered service in January 1943. She provided cover for the Guadalcanal evacuation in February. She was deployed to Rabaul in October and conducted reinforcement missions to Bougainville and Buka in the northern Solomons. On November 25, she was sunk with all hands by at least two American destroyer-launched torpedoes at the Battle of Cape St George on another transport mission to Buka.

***Suzunami*:** She began fleet operations in October 1943. She was sunk on November 11 in Rabaul harbor by a bomb hit from American carrier aircraft with heavy loss of life.

***Takanami*:** Upon completion, she was assigned to support operations off Guadalcanal. In October 1942, she participated in two bombardments of Henderson Field and in the Battle of Santa Cruz. She escorted an unsuccessful troop convoy to Guadalcanal in mid-November. She played a key role in the Battle of Tassafaronga on November 30. Acting as a scout in advance of the Japanese destroyer force, she drew the bulk of American attention and gunfire, allowing other destroyers to launch torpedo attacks. Before she was sunk by American cruiser gunfire, *Takanami* was able to launch her torpedoes, which heavily damaged the heavy cruisers *Minneapolis* and *New Orleans*.

***Tamanami*:** She was fully operational in July 1943. She operated as far south as Rabaul in November. She conducted general escort duties in the Central Pacific until June 1944, when she participated in the Battle of the Philippine Sea. She was torpedoed on July 7, 1944 by the American submarine USS *Mingo* southwest of Manila, and sank with all hands.

***Yugumo*:** The lead ship of the class was completed a couple of days before the attack on Pearl Harbor, but her first operation was not until the Battle of

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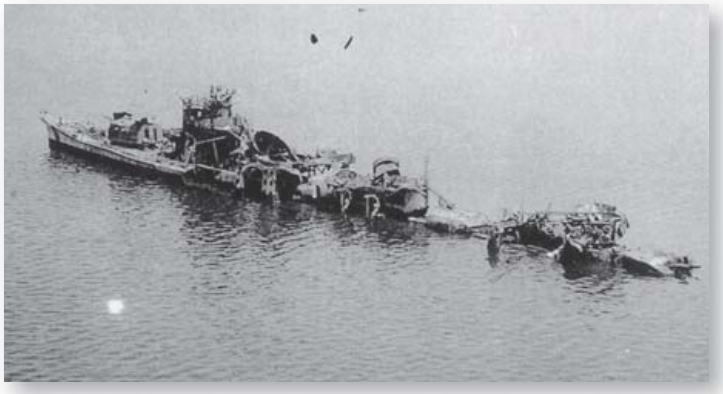

The wreck of *Okinami* pictured in February 1945. *Okinami* was one of many Japanese destroyers lost during the Philippines campaign to American air attack because of insufficient air cover and inadequate anti-aircraft capabilities. The ship was sunk on November 13, 1944 in Manila harbor, but only 14 crewmen were lost. (Naval History and Heritage Command)

Midway in June 1942, when she was assigned to escort the Striking Force. She remained with the carriers in August at the Battle of the Eastern Solomons and in October at the Battle of Santa Cruz. She conducted several missions to Guadalcanal in November, including the unsuccessful bombardment on November 14. In February 1943, she participated in two of three evacuation missions from Guadalcanal. She was active in operations in the central Solomons before returning to Japan in May. She participated in the July evacuation of Kiska in the Aleutians. She returned to the Solomons in September and played a central role in the Battle of Vella Lavella on October 6–7 against American destroyers. *Yugumo* aggressively engaged the American force, but in return was crippled by gunfire. However, her torpedo attack hit the destroyer USS *Chevalier*, which eventually sank. *Yugumo* was finished off by American destroyer gunfire and at least one torpedo.

Yugumo Class Specifications	
Displacement	Standard: 2,077 tons
Dimensions	Length: 391ft overall / Beam: 35ft 6in / Draft: 12ft 4in
Speed	35kts
Range	5,000nm at 18kts
Crew	228

SHIMAKAZE

Design and Construction

The ultimate expression of the heavy fleet destroyer in the mold of a large torpedo boat was the experimental *Shimakaze*. This ship was a prototype that carried an extraordinary torpedo fit and possessed a very high maximum speed. The design was known as the Type C destroyer and was part of the 1939 Program.

***Shimakaze* Construction**				
Ship	**Built at**	**Laid down**	**Launched**	**Completed**
Shimakaze	Maizuru Navy Yard	08/08/41	07/18/42	04/30/43

The new Type C design was based on the Yugumo-class design, but to accommodate the addition of a third quintuple torpedo mount another 25 feet of length was added. The cost in topweight for providing torpedo reloads was too great, so none were carried. To develop the very high speeds necessary to gain a tactical advantage in combat, new boilers and machinery were needed. The new boilers developed very high temperatures and pressure, which in turn developed 76,010shp. The ship received a new type of turbine, which generated 50 percent more power than typical turbines used in destroyers. On trials, she developed an impressive 79,240shp and a speed of 40.9 knots.

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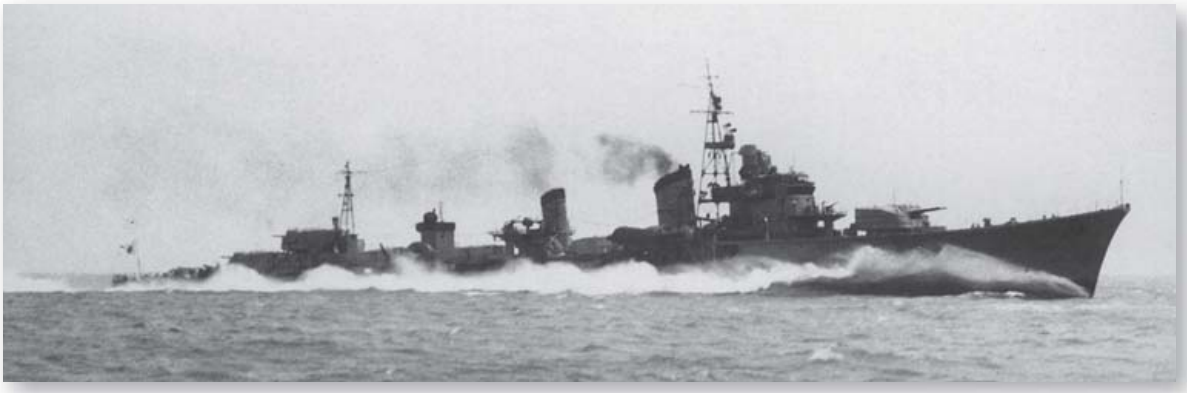


Shimakaze in May 1943 shortly after being completed. The ship is steaming at high speed. Even though her top speed was an impressive 39 knots and the ship possessed an unrivaled torpedo armament, it was impossible to mass-produce this design and only a single unit was ever produced. Note that the ship was completed with a No. 22 radar on the foremast and the position for the twin 25mm gun in front of the bridge. (*Ships of the World*)

Such a complex design was impractical in the face of wartime losses, where expediency and simplicity were essential. Therefore, 16 additional Type C units under the 1942 Program were canceled.

Armament and Service Modification

Since her three quintuple mounts could be trained to either beam, *Shimakaze* had the largest torpedo broadside of any World War II destroyer. The main gun battery was the usual six 5in guns in three Type D twin mounts, one forward and two aft. *Shimakaze* was launched in May 1943 with a No. 22 radar on the foremast, two triple 25mm mounts amidships, and a twin 13mm in front of bridge.

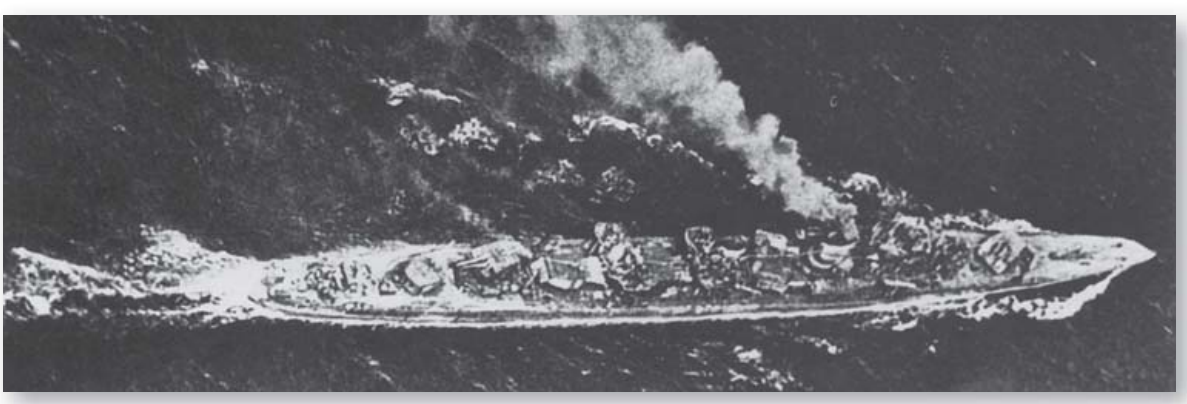
In June 1944, she returned to Japan and received a typical mid-war modification. Another set of triple 25mm mounts, seven single 25mm, and one single 13mm gun were added. Also, a No. 13 radar was added to the leading edge of the mainmast.

Wartime Service

For such a potentially extraordinary ship, *Shimakaze* had a very ordinary career. In an indication of how she was viewed by the Japanese, she was never directly assigned to a destroyer division but always to her squadron directly. She was one of the first destroyers to receive radar.

After joining the fleet in July 1943, her first action was during the second and successful evacuation mission to Kiska on July 29, during which she acted as flagship for the screening force. In June 1944, she was assigned as part of the abortive Biak transport operation, and then participated in the

This view shows *Shimakaze* under air attack on November 11, 1944. The destroyer was assigned to escort convoy TA Number 3 from Manila to Ormoc on Leyte. Approaching the port, the ship was crippled by near misses and drifted throughout the afternoon on fire until exploding. Clearly visible are the three torpedo launchers and the four triple 25mm mounts amidships. (*Ships of the World*)



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Battle of the Philippine Sea. Following refit in Japan, she was assigned to the First Diversionary Attack Force and participated in the Battle of Leyte Gulf. In the action off Samar, she was unable to use her impressive torpedo battery since she was loaded with survivors from Japanese cruisers sunk earlier. Subsequently, she was assigned to escort convoys from Manila to Leyte. *Shimakaze* was sunk by carrier aircraft on November 11 in Ormoc Bay.

***Shimakaze* Specifications**	
Displacement	Standard: 2,567 tons
Dimensions	Length: 415ft overall / Beam: 36ft 9in / Draft: 13ft 6in
Speed	39kts
Range	5,800nm at 18kts
Crew	267

AKIZUKI CLASS

Design and Construction

To complement the Type A destroyers, the Japanese envisioned another design built to act as anti-aircraft screening units for carriers. As originally conceived, these destroyers (called Type B by the Japanese) were large enough to carry four twin mounts of the new Type 98 3.9in guns. To do so without creating topweight problems, the ships were some 700 tons larger and 50 feet longer than the preceding Type A units. Not surprisingly, the Japanese decided to increase the Type B's offensive potential before the design was finalized by adding a single quadruple torpedo mount with four reloads. The final result was a fine multipurpose destroyer that the Japanese considered their most successful destroyer design.

The ship presented a very balanced and powerful appearance, making it the most handsome of Japanese destroyers. The four 3.9in mounts were placed in pairs fore and aft, with the Number 2 and 3 mounts in a superfiring position. The bridge structure was compact but tall enough to give a field of vision over the Number 2 mount. There was a single-trunked stack for the three Kanpon boilers that drove the two turbines and produced 52,000shp, enough to propel the ship at a maximum speed of 33 knots. The layout of the machinery was changed so that there were two separate engine and boiler rooms in an effort to increase resistance to battle damage.

D

THE YUGUMO CLASS AND UNIQUE *SHIMAKAZE*

The top and middle plates show the Yugumo-class ship *Kishinami* as she appeared in October 1944 at the Battle of Leyte Gulf. The forward slope of the bridge structure is evident, identifying her as a Yugumo-class unit. The late-war presence of her superfiring 5in mount aft also mark her as a Yugumo-class unit, since surviving Asashio and Kagero units had their superfiring mount replaced by 1944. *Kishinami*'s augmented anti-aircraft fit is evident with four triple 25mm mounts, a twin 25mm mount in front of the bridge, and 14 single mounts. The 1944 radar fit for Yugumo-class units included a No. 22 on the foremast and a No. 13 set on the mainmast as shown here. Note the paravanes have also been removed and replaced by two stern rails for the increased number of depth charges carried.

The bottom view is *Shimakaze* as she appeared in October 1944. Her configuration is similar to a Yugumo-class unit, but with additional length to allow the addition of a third torpedo launcher. All three of the mounts are quintuple, making her the only Japanese destroyer so equipped. The late-war anti-aircraft and radar modifications are similar to that of *Kishinami* described above.

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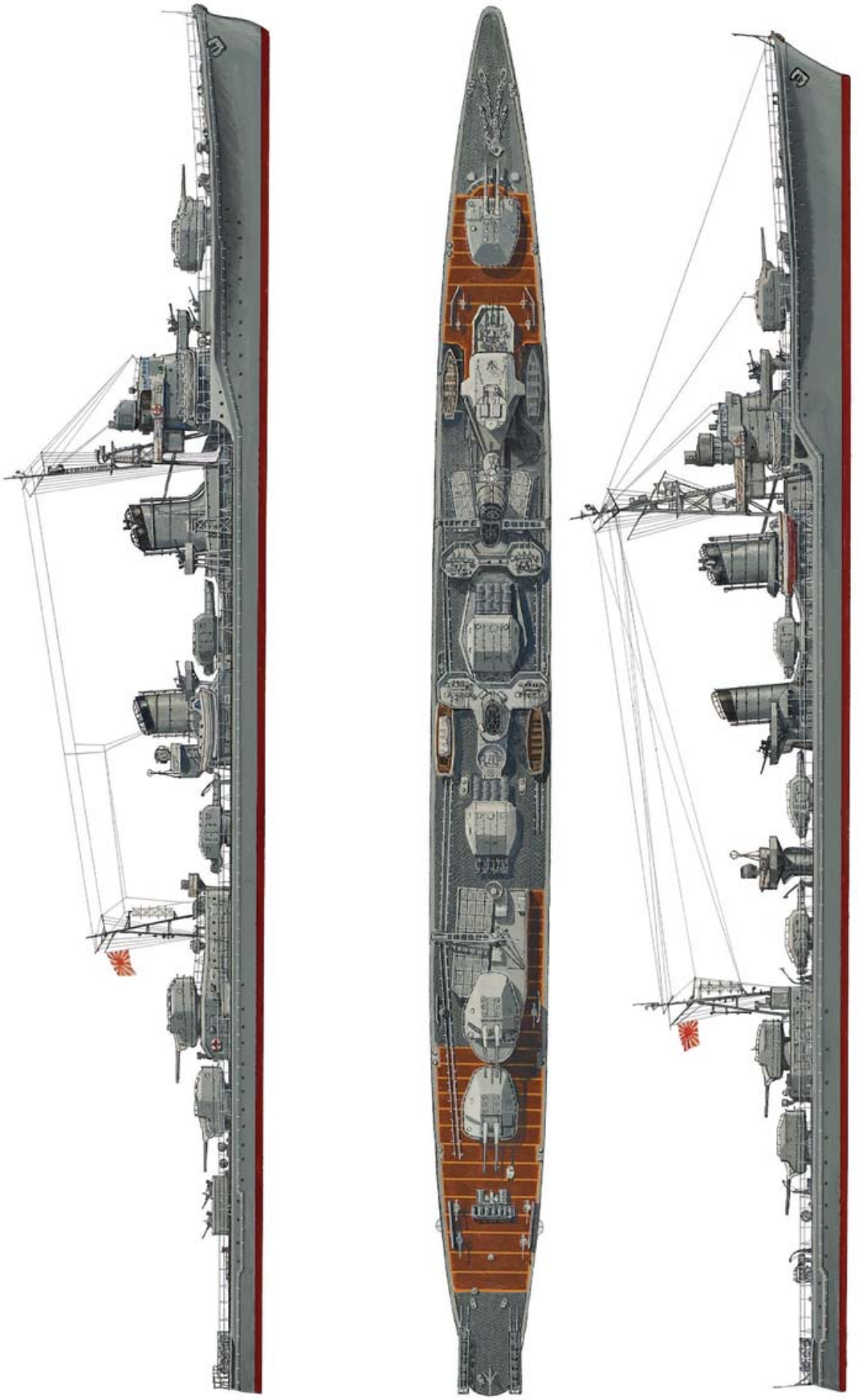

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This view shows an Akizuki-class destroyer in an early war configuration. Only six of the 12 units in the class were completed in time to play any role in operations before the final battles of 1944–45. (Naval History and Heritage Command)

Akizuki Class Construction				
Ship	**Built at**	**Laid down**	**Launched**	**Completed**
Akizuki	Maizuru Navy Yard	07/30/40	07/02/41	06/13/42
Fuyuzuki	Maizuru Navy Yard	05/08/43	01/20/44	05/25/44
Hanazuki	Maizuru Navy Yard	02/10/44	10/10/44	01/31/45
Harutsuki	Sasebo Navy Yard	12/23/43	08/03/44	12/28/44
Hatsuzuki	Maizuru Navy Yard	07/25/41	04/03/42	12/29/42
Natsuzuki	Sasebo Navy Yard	05/01/44	12/02/44	04/08/45
Niizuki	Nagasaki by Mutsubishi	12/08/41	06/29/42	03/31/43
Shimotsuki	Nagasaki by Mutsubishi	07/06/42	04/07/43	03/31/44
Suzutsuki	Nagasaki by Mutsubishi	03/15/41	03/04/42	12/20/42
Teruzuki	Nagasaki by Mutsubishi	11/13/40	11/21/41	08/31/42
Wakatsuki	Nagasaki by Mutsubishi	03/09/42	11/24/42	05/31/43
Yoizuki	Uraga	08/25/43	09/25/44	12/26/44

Six of this class were authorized in 1939 and another ten in 1941. Only one of the last four was even laid down before all were canceled. Later units in the class were completed to a simplified hull shape to decrease production time.

Since this class met all expectations, another slightly larger improved group of 16 ships was authorized in the 1942 Program with another 22 ships to follow. All of these were canceled before construction started.

Armament and Service Modifications

The design centered on the Type 98 3.9in gun. Unlike previous 5in guns mounted on Japanese destroyers, this was a true dual-purpose gun. The gun proved excellent in service, combining reliability and a high rate of fire. Its range was actually superior to the standard American 5in destroyer gun. Specifications for the gun are provided below:

Type 98 3.9in gun	
Muzzle velocity	3,378ft/sec
Rate of fire	15rpm
Maximum range	21,255yd (effective range 15,260yd)
Maximum elevation	90 degrees
Shell weight	28.6lb

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Akizuki pictured in May 1942, a month before she was completed. This beam view shows the elegance and balance of her design. In this early war configuration, she carried no radars and only two twin 25mm mounts. (Yamato Museum)

In order to engage aircraft effectively, the ships were fitted with the Type 94 fire-control director capable of tracking high-angle targets. As designed, one director was envisioned for each set of forward and aft mounts. The forward fire-control director was placed above the bridge and the second aft on a small deckhouse. Production shortages of the Type 94 meant that the last five ships never received their second director aft, and eventually these were removed on all ships in favor of an additional triple 25mm mount.

The ship's primary offensive punch against surface targets was the standard Type 92 quadruple torpedo mounts capable of firing the Type 93 oxygen-propelled torpedo. Four reloads were also carried. For antisubmarine work, two Type 94 depth charge projectors and 54 depth charges were originally fitted. Ships built later in the war were completed with stern rails and storage was increased to 72 depth charges.

In spite of the ship's mission to act as an anti-aircraft ship, initial light anti-aircraft weaponry was limited to an inadequate two twin 25mm mounts placed amidships. *Teruzuki* was the only ship not modified from this configuration, since she was lost in December 1942. As was the case for all other surviving Japanese destroyers, the anti-aircraft fit of the Akizuki class was greatly strengthened as the war progressed. The twin mounts were replaced by triple 25mm mounts, and another pair of triple mounts was placed abreast the stack. As already mentioned, a fifth triple mount was added in place of the aft Type 94 director. The final upgrade, which took place in late 1944 or early 1945, added another set of 25mm triple mounts abreast the bridge for a total of seven triple mounts. In this configuration, 20 additional single 25mm guns were added for a total of 41 25mm barrels.

Natsuzuki was one of four Akizuki-class units completed too late to play any meaningful role in operations. This is the ship on her completion date of April 8, 1945, but note that although she is in a late-war configuration, none of her 25mm triple mounts have yet been fitted. (Yamato Museum)

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An unidentified Akizuki-class unit photographed by American aircraft in 1942–43. The large size of the *Akizuki* and her single-trunked stack often caused American aviators to identify her as a cruiser. (Naval History and Heritage Command)

At least five ships, *Fuyuzuki*, *Hanazuki*, *Natsuzuki*, *Suzutsuki*, and *Yoizuki*, were so configured. The four ships sunk in late 1944, *Akizuki*, *Hatsuzuki*, *Shimotsuki*, and *Wakatsuki*, were lost with five triple mounts and a varying number of single mounts (as high as 24 on *Hatsuzuki*). *Niizuki* was lost in 1943 with a total of four 25mm triple mounts.

All except *Akizuki* and *Teruzuki* were completed with a radar platform on the foremast. *Akizuki* and all ships completed mid-war received the first Japanese air-search radar known as the Type 2 (1942) shipboard search radar Model 1 Modification 2 (or more simply No. 21 (2)) on this platform. The No. 21 (2) radar was a large device with a mattress antenna. Specifications for the radar are provided below.

No. 21 Mod. 2 Radar	
Peak power output	5kW
Maximum range	93 miles
Effective range	
Single aircraft	43 miles
Group of aircraft	62 miles
Accuracy	1,094–2,187yd
Bearing accuracy	5–8 degrees

In addition to the No. 21 (2) radar, ships completed in or surviving to 1944 received the No. 13 radar. This was also an air-search radar, and was fitted on the leading edge of the mainmast. The last five ships completed during the war replaced the outdated No. 21 (2) radar on the radar platform with later version of the No.22 radar, which was maximized for surface search. These ships also received a second No. 13 radar on the foremast above the radar platform.

E

THE AKIZUKI CLASS

Arguably the best Japanese destroyer design was the Akizuki class. The top and middle plates are of *Teruzuki* is she appeared in 1942. She is representative of the early war Akizuki-class configuration. Overall, the ship projects a powerful and balanced appearance with her two pairs of 3.9in twin mounts, the tall and compact bridge, and the single stack. Note that there is no radar at this point and that the only light anti-aircraft guns are two twin 25mm mounts amidships.

The bottom view is of *Shimotsuki* as she appeared in October 1944. Among the many changes evident in this late-war configuration is the modification of the foremast to allow the addition of a No. 21 radar and the addition of a No. 13 radar on he mainmast. The anti-aircraft fit has been significantly increased and now totals five triple 25mm mounts and 14 single 25mm guns. The aft fire-control director has been replaced by one of the triple mounts.

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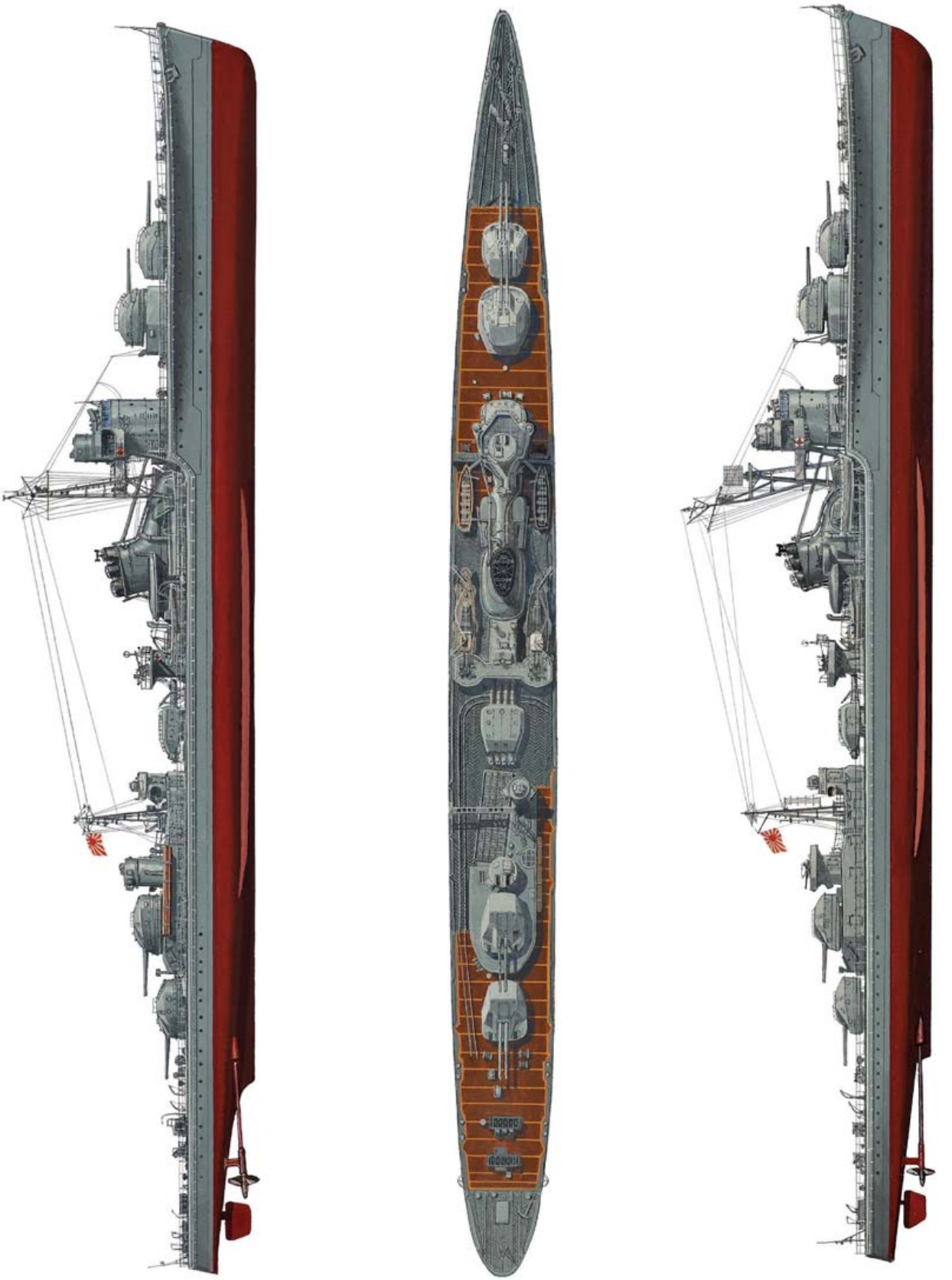

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Harutsuki pictured in January 1945 after completion. The ship did not conduct any major operations before being surrendered to the Soviet Union. This beam view shows all the features of a late-war Akizuki-class configuration. Note the No. 22 radar on the foremast and a No. 13 radar on both the fore and mainmast. The ship carried seven triple 25mm mounts and at least 22 single 25mm guns. (Naval History and Heritage Command)

Wartime Service

The Akizuki class made up Destroyer Divisions 41 and 61 and, as intended, were often assigned to carrier screening duty. Their large size also made them ideal flagships, and they were employed in several surface actions in this capacity.

***Akizuki*:** She joined the fleet in June 1942 and participated in the carrier Battle of the Eastern Solomons in August. In October, she was assigned to escort a large convoy to Guadalcanal and suffered moderate damage on October 25. She was forced to return to Japan for repairs, but returned to Solomons operations by mid-January 1943. She was torpedoed by the submarine USS *Nautilus* on January 19 and again forced to return to Japan. She was heavily damaged on March 14 when her keel buckled upon departure from Saipan. She was towed ashore and beached, but was returned to service in October. She participated in the carrier battle of the Philippine Sea. She was assigned to the Northern Force for the Battle of Leyte Gulf and sunk by probable aircraft torpedo on October 25, with heavy loss of life.

***Fuyuzuki*:** She was operational by June 1944. She was torpedoed by an American submarine on October 12 and suffered medium damage. She escorted the carrier *Junyo* to Manila in November; she then returned to Japan and escorted *Yamato* on her April 1945 mission to Okinawa. She survived the operation with only light damage. She suffered heavy damage from a mine after the war and was not repaired.

***Hanazuki*:** She was operational by March 1945, but did not leave home waters. She was surrendered and turned over to the United States.

***Harutsuki*:** She was operational by March 1945 but did not leave home waters. She was surrendered and turned over to the Soviet Union.

***Hatsuzuki*:** She began fleet operations in March 1943 and was active as far south as Rabaul. She participated in the Battle of Philippine Sea in June 1944. She assigned to the Northern Force during the Battle of Leyte Gulf. She was sunk by gunfire from four cruisers and several destroyers on October 25.

***Natsuzuki*:** She hit a mine on June 16, 1945 after entering service. She was surrendered and turned over to Great Britain.

***Niizuki*:** She began fleet operations in May 1943. On July 5, she led a destroyer transport run to Kolombangara in the Central Solomons. She launched part of an

Many of the Akizuki-class units were completed too late to have meaningful combat careers. An example is *Hanazuki*, shown here in October 1945 after being surrendered to the Americans. Though already partially disarmed with all her light anti-aircraft guns missing, the ship is a good example of a late-war Akizuki-class configuration, with a No. 22 radar on the foremast and a No. 13 radar on both the fore and mainmast. The ship also has the positions for triple 25mm mounts abreast the bridge. (Naval History and Heritage Command)

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Harutsuki was turned over to the Soviet Union in 1947. In 1959, she reappeared, disarmed, as a probable target ship, as shown in this view from July 1959. She may have served until 1965. (Naval History and Heritage Command)

11-mile torpedo strike (the longest of the war), which sank an American destroyer. The next day, she was sunk at the Battle of Kula Gulf by gunfire from three American cruisers, but by absorbing their attention she allowed other Japanese destroyers to launch torpedoes and sink a light cruiser.

***Shimotsuki*:** She joined the fleet in June 1944 and participated in the Battle of the Philippine Sea. In October, she participated in the Battle of Leyte Gulf and suffered moderate damage from bomb near-misses. She was sunk by three torpedoes from the submarine USS *Cavalla* after departing Singapore on November 25, with only 46 survivors.

***Suzutsuki*:** She began fleet operations in March 1943 and conducted several missions to Rabaul through August. On January 16, 1944, she was hit by two submarine-launched torpedoes that blew off her bow and stern, killing 135 crewmen. She returned to service in October, but on October 16 she was again hit by a submarine torpedo and lost part of her bow. She was assigned to escort the superbattleship *Yamato* in April 1945. She was heavily damaged by air attack on April 7 and not fully repaired by the war's end.

***Teruzuki*:** Her first action was at the carrier battle of Santa Cruz in October 1942, where she was slightly damaged by a bomb. She participated in the first naval battle of Guadalcanal on November 13, where she engaged several American ships; she damaged the destroyer USS *Sterett*. She returned two nights later in the second naval battle of Guadalcanal and engaged the battleship USS *South Dakota*; *Teruzuki* was undamaged in both actions. She was sunk by an American PT boat torpedo off Guadalcanal on the night of December 11–12 after fires reached the ship's depth charges and created massive explosions.

This shot of *Suzutsuki* was taken on September 1945 and shows the unrepaired damage on her starboard side from a bomb hit on April 7. The ship was used as a recruit training school for the rest of the war. Note the radar and anti-aircraft positions common to the late-war Akizuki-class configuration. (Naval History and Heritage Command)

***Wakatsuki*:** She departed Japan in August 1943 for Truk, and participated in the Battle of Empress Augusta Bay off Bougainville Island on November 2. She was involved in the Battle of the Philippine Sea in June 1944 and later as part of the Northern Force during the Battle of Leyte Gulf in October. She was sunk by air attack near Ormoc, Leyte on November 11 with heavy loss of life.

***Yoizuki*:** She was operational by May 1945, but did not leave home waters. She suffered light mine damage on June 5. She was surrendered and turned over to the Nationalist Chinese, and was scrapped in 1963.

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Akizuki Class Specifications	
Displacement	Standard: 2,701 tons
Dimensions	Length: 440ft 4in overall / Beam: 38ft / Draft: 13ft 6in
Speed	33kts
Range	5,000nm at 18kts
Crew	290 (later rising to *c.*330)

MATSU/TACHIBANA CLASS

Design and Construction

By 1942, the Japanese realized that heavy destroyer losses could not be made up by continuing the construction of large fleet units. The result was a design that was suitable for quick and massed production. This new class would be able to perform front-line transport duties, which would save the larger destroyers to operate with the fleet. Because these ships were envisioned as general escorts, their armament was on a reduced scale, as was their speed. Nevertheless, the Japanese still saw these units as capable of working with the main fleet if required. These ships have been called destroyer escorts and compared to their American counterparts, but in fact they were larger than American destroyer escorts and better armed.

The design of the new class, which came to be known as the Matsu class, stressed simplicity. This included the equipment onboard, which was meant to be operated by crew members without the prewar level of training. Whereas a Yugumo-class ship would take about a year to build, a Matsu-class destroyer could be completed in about six months.

Another area of simplicity was the machinery that could only develop 19,000shp, which translated to a top speed of just under 28 knots. It was thought that this would be sufficient for almost all required duties, but it was much less than previous destroyers, where speed was an area of design emphasis. The reduced length meant that only two boilers were fitted, and these were of a simpler design that did not operate at high temperatures and which drove less powerful turbines. One notable design feature was the separation of the boiler and the machinery rooms, so that a single hit could not knock out all propulsive power.

Twenty-eight units of the original design were ordered and work began in August 1943. In mid-1944, the last ten were canceled and replaced with a further simplified design known as the Tachibana class. The Japanese planned to build another 100 of the Tachibana units, but only another 13 were laid down until all construction was canceled in favor of special-attack units.

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SUZUTSUKI* DURING OPERATION *TEN-GO

Suzutsuki is shown in action during Operation *Ten-Go*, the final sortie of superbattleship *Yamato* in April 1945. The ship has just taken a bomb-hit forward on the starboard side, which caused a serious fire and flooding. The damage forced *Suzutsuki* to limp back to port stern first. She was one of the four destroyers to survive *Yamato*'s last sortie, but suffered 57 dead and 34 wounded and was never repaired before the end of the war. The view also shows an Akizuki-class unit in a late-war configuration. Note that the No. 21 radar on the foremast has been replaced by a No. 22 radar on the platform and a second No. 13 higher up on the mast. The anti-aircraft fit was further reinforced by a third pair of 25mm triple mounts positioned abreast the bridge structure and additional single 25mm guns, for a final total of 19.

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Matsu Class Construction				
Ship	**Built at**	**Laid down**	**Launched**	**Completed**
Hinoki	Yokosuka Navy Yard	03/04/44	07/04/44	09/30/44
Kaede	Yokosuka Navy Yard	03/04/44	07/25/44	10/30/44
Kashi	Osaka by Fujinagata	05/05/44	08/13/44	09/30/44
Kaya	Maizuru Navy Yard	04/10/44	07/30/44	09/30/44
Keyaki	Yokosuka Navy Yard	06/22/44	09/30/44	12/15/44
Kiri	Yokosuka Navy Yard	02/01/44	05/27/44	08/14/44
Kuwa	Osaka by Fujinagata	12/20/43	05/25/44	07/25/44
Maki	Maizuru Navy Yard	02/19/44	06/10/44	08/10/44
Matsu	Maizuru Navy Yard	08/08/43	02/03/44	04/28/44
Momi	Yokosuka Navy Yard	02/01/44	06/16/44	09/07/44
Momo	Maizuru Navy Yard	11/05/43	03/25/44	06/10/44
Nara	Osaka by Fujinagata	06/10/44	10/12/44	11/26/44
Sakura	Yokosuka Navy Yard	06/02/44	09/06/44	11/25/44
Sugi	Osaka by Fujinagata	02/25/44	07/03/44	08/25/44
Take	Yokosuka Navy Yard	10/25/43	03/28/44	06/16/44
Tsubaki	Maizuru Navy Yard	06/20/44	09/30/44	11/30/44
Ume	Osaka by Fujinagata	12/01/43	04/24/44	06/28/44
Yanagi	Osaka by Fujinagata	08/20/44	11/25/44	01/18/45

The Tachibana class was even simpler, to facilitate quick production. The hull form was reduced to straight lines to avoid complex steel work and the bridge structure modified. Since the armament remained the same, the modified foremast (which combined the mast and separate radar tower on the Matsu class) became the primary distinguishing feature of the new class. Mild steel was used, which increased displacement by 50 tons.

Tachibana Class Construction				
Ship	**Built at**	**Laid down**	**Launched**	**Completed**
Enoki	Maizuru Navy Yard	10/14/44	01/27/45	03/31/45
Hagi	Yokosuka Navy Yard	09/11/44	11/27/44	03/01/45
Hatsuume	Maizuru Navy Yard	12/08/44	04/25/45	06/18/45
Hatsuzakura	Yokosuka Navy Yard	12/04/44	02/10/45	05/28/45
Kaba	Osaka by Fujinagata	10/15/44	02/27/45	05/29/45
Kaki	Yokosuka Navy Yard	10/05/44	12/11/44	03/05/45
Kusunoki	Yokosuka Navy Yard	11/09/44	01/18/45	04/28/45
Nashi	Kobe by Kawasaki	09/01/44	01/17/45	03/15/45
Nire	Maizuru Navy Yard	08/14/44	11/25/44	01/31/45
Odake	Maizuru Navy Yard	11/05/44	03/10/45	05/15/45
Shii	Maizuru Navy Yard	09/18/44	01/13/45	03/13/45
Sumire	Yokosuka Navy Yard	10/21/44	12/27/44	03/26/45
Tachibana	Yokosuka Navy Yard	07/08/44	10/14/44	01/20/45
Tsuta	Yokosuka Navy Yard	07/31/44	11/02/44	02/08/45
Azusa, *Hishi*, *Katsura*, *Kuzu*, *Sakaki*, *Tochi*, *Wakazakura*, *Yadake*, and *Yaezakura* were scrapped in various stages of construction.				

Armament and Service Modifications

The Matsu class was well armed for a ship of its size. The primary offensive weapon was the quadruple torpedo launcher, but no reloads were carried. The main gun battery was changed from the 5in gun mounted on every

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Maki pictured in July 1944. She was completed with eight single 25mm guns but has not yet received her No. 13 radar. The ship was completed in time to participate in the Battle of Leyte Gulf, where she was damaged by a bomb hit and several near misses. In December 1944, she was struck by a torpedo and again survived, proving the toughness of her design. (Yamato Museum)

destroyer since the Fubuki class to the Type 89 high-angle 5in gun that was the primary anti-aircraft gun on larger ships. A single mount was fitted forward and provided with only a partial antispray shield, and a dual mount aft was provided with no protection at all. However, the effectiveness of the Type 89 in an anti-aircraft role was reduced by the fact that there was no high-angle fire-control director provided in the design.

Type 89 5in gun	
Muzzle velocity	2,362ft/sec
Rate of fire	14rpm max, 11–12rpm effective
Effective range	
Horizontal	14,435yd
Vertical	8,858yd
Effective	8,092yd
Shell weight	50.71lb

Anti-aircraft weaponry was heavy, with early production units having four triple mounts and usually eight single 25mm guns. All units carried a No. 22 radar abaft of the bridge, and all except very early production ships were fitted with a No. 13 radar on the mainmast aft. Since the class was designed to act as antisubmarine screening ships, the units carried a large depth charge load that could be deployed by two Type 94 projectors, two stern racks, and four Type 3 depth charge loading stands.

Since the class did not even start to reach the fleet until mid-1944, few modifications were conducted for the remainder of the war. By late 1944, the number of single 25mm guns was increased to 13, including one on centerline abaft the second stack. A No. 13 radar was added on the mainmast of those units not previously fitted with it. The Tachibana class, entering service in 1945, was launched with both radars and 13 single 25mm guns.

Later, as many as 19 single guns were fitted. One ship, *Take*, had provisions added on her stern to launch a single *kaiten*, or manned torpedo.

Momi pictured on September 4, 1944 just before completion. The ship appears to have 12 single 25mm guns in addition to the four triple mounts. *Momi* was completed in time to operate beyond home waters and was sunk with all hands on January 5, 1945, 28 miles west-southwest of Manila, by carrier air attack. (Yamato Museum)

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Several Matsu- and Tachibana-class destroyers shown after the war. In the foreground is the Tachibana-class ship *Kaba*, and behind her is an unidentified Matsu-class unit. A comparison of *Kaba*'s hull lines shows them to be simplified compared to the adjacent Matsu-class unit in an effort to speed construction times. Note the different arrangements for mounting the No. 22 radar. (*Ships of the World*)

Wartime Service

Matsu Class

Matsu-class ships made up Destroyer Divisions 43, 52, and 53. Given the time of their completion, few units saw extensive service beyond home waters.

***Hinoki*:** She began a series of escort missions in October 1944, mostly in Philippine waters. On January 5, 1945, she departed Manila for Indochina, but was intercepted by an Allied force led by the American destroyer USS *Bennion*. She was forced to turn back, and was damaged by air attack from American escort carriers. She attempted to depart Manila again on January 7 was intercepted by four American destroyers, and sunk by gunfire with all hands.

***Kaede*:** She began operations in January 1945 by escorting a convoy to Hong Kong. On January 31, she was damaged by air attack south of Formosa and forced to return to Japan. She was surrendered and turned over to China, but did not enter service.

***Kashi*:** She was sent to southern waters in November 1944. She participated in the San Jose bombardment operation in December. She was damaged by carrier air attack in Formosa in January 1945 and again later in Kure on July 28. She was surrendered and handed over to the United States.

***Kaya*:** She began a series of escort operations in November 1944; she participated in the San Jose bombardment in December. She returned to Japan and surrendered; she was handed over to the Soviet Union.

This fine beam view of Tachibana-class unit *Hagi* in February 1945 shows the layout of the ship's armament, including the 25mm single guns. The long device on the leading edge of the mainmast is a No. 13 air-search radar. (Yamato Museum)

***Keyaki*:** She did not leave home waters after entering service in March 1945. She surrendered, and was turned over to the United States and later expended as a target.

***Kiri*:** She participated in the Battle of Leyte Gulf in October 1944, assigned to the Northern Force. Later she was active in the southern area on escort duty. She escorted a

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THE MATSU AND TACHIBANA CLASSES

The subject of the top and middle plates is *Hinoki*. She is a Matsu-class unit and represents a late-war (October 1944) configuration. The Matsu class was not an elegant design, but they were heavily armed for their size and demonstrated the ability to sustain severe damage. As completed, the ships fitted a single 5in gun forward and a twin mount aft. These were Type 89 high-angle guns, making them the only Japanese destroyer to carry this weapon. Four triple 25mm mounts were fitted, along with a number of single 25mm guns.

The bottom view is *Tachibana* as she appeared in January 1945 when completed. The ship was the lead unit in her class, which was a more basic version of the Matsu class. The primary visible difference between the two classes is the modified foremast; note the absence of a dedicated radar tower for the No. 22 radar on *Tachibana*.

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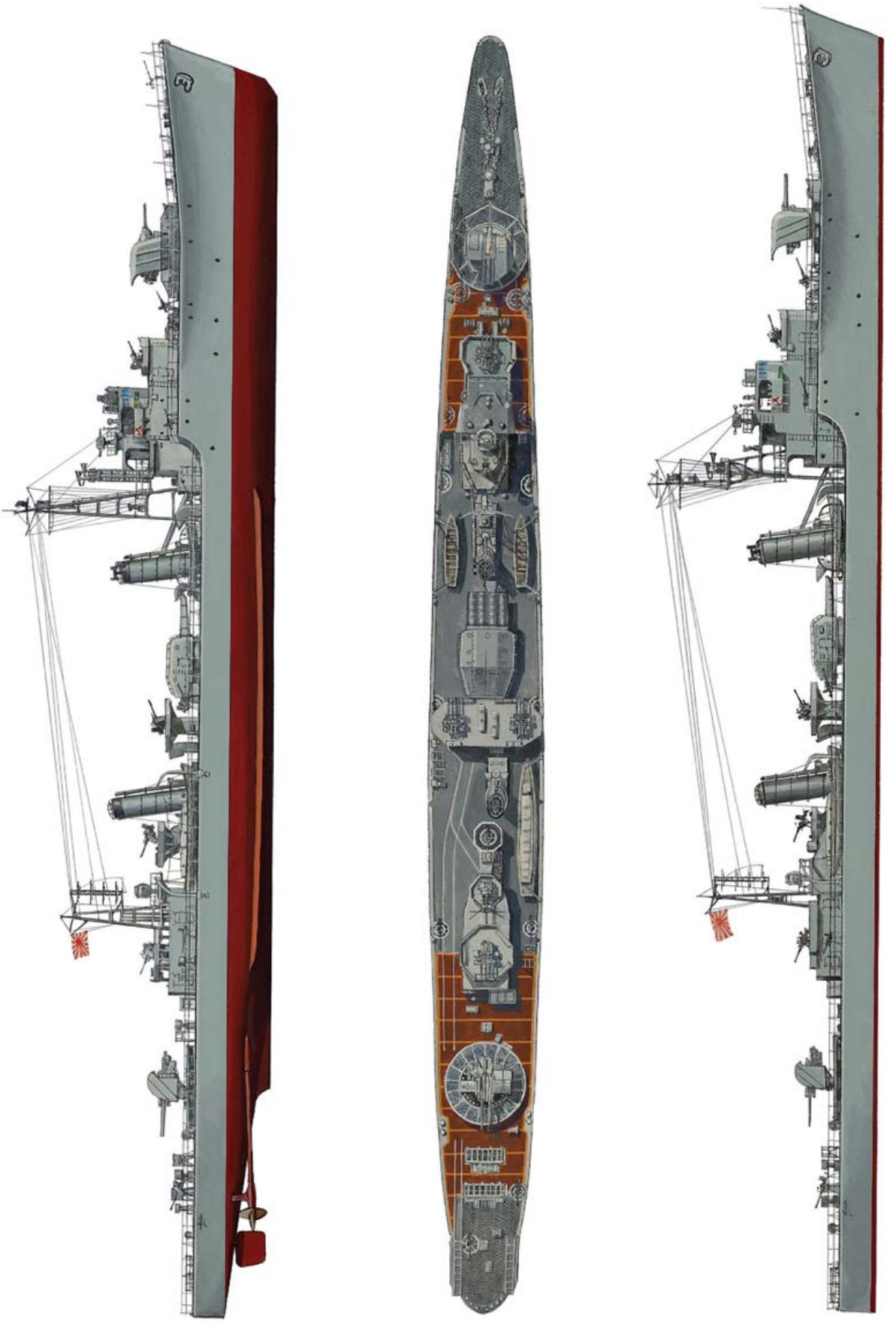

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Matsu-class unit *Maki* pictured in Manila Bay on October 29, 1945. All the seaworthy destroyers surrendered after the war were employed in repatriation duties to return Japanese servicemen throughout the Pacific and Asia to Japan. The ships were disarmed and provided with additional deckhouses for this purpose. (Naval History and Heritage Command)

convoy to Leyte and suffered damage in an air attack on December 12. She returned to Japan and surrendered; she was turned over to the Soviet Union.

***Kuwa*:** She participated in the Battle of Leyte Gulf as part of the Northern Force. She was sunk by American destroyer gunfire in Ormoc Bay off Leyte on December 3, 1944.

***Maki*:** She participated in the Battle of Leyte Gulf as part of the Northern Force and was damaged by carrier air attack. She was damaged again by a submarine-launched torpedo in December. She spent the reminder of the war in home waters; she surrendered and was handed over to Great Britain.

***Matsu*:** She was fully operational in July 1944. On a convoy escort mission to Chichi-jima, she was damaged by carrier aircraft and then sunk by destroyer gunfire on August 4, 1944.

***Momi*:** She began a series of escort missions in October 1944, mostly in Philippine waters. On January 5, 1945, she departed Manila for Indochina, but was intercepted by an Allied force led by the American destroyer USS *Bennion*. She was forced to turn back, and was sunk by air attack from American escort carriers.

***Momo*:** She entered service in July 1944. She operated primarily in Philippine waters from November until she was torpedoed and sunk off Luzon by the submarine USS *Hawkbill* on December 15.

***Nara*:** She was operational in March 1945; she was heavily damaged by a mine near Shimonoseki Strait on June 30 and not repaired by the war's end. She was surrendered and scrapped.

***Sakura*:** She commenced operations in February 1945 by escorting a convoy to Formosa. She returned to Japan in March and was sunk in Osaka harbor on July 11 by a mine explosion that killed 130 of her crew.

***Sugi*:** She participated in the Leyte operation assigned to the Northern Force. She escorted a convoy to Leyte and suffered damage in an air attack on December 7; she was part of the San Jose bombardment operation in late December. She returned to Japan and surrendered; she was turned over to China and served until 1957.

***Take*:** The most successful ship of her class, *Take* was active off Okinawa, Palau, and then the Philippines from mid-1944. On October 24, she assisted in the sinking of the American submarine USS *Shark II*. She escorted three convoys from Manila to Leyte in November–December 1944. She torpedoed and sunk an American destroyer on her third mission. She returned to Japan, surrendered, and was turned over to Great Britain.

***Tsubaki*:** She escorted a convoy to Shanghai in February 1945. She was damaged by a mine in Chinese waters on April 10. She returned to Japan and was damaged by a carrier air attack on July 24. She surrendered and was scrapped.

***Ume*:** From October 1944, she was active primarily in Philippine waters including the escort of one convoy from Manila to Leyte in December. She was sunk by air attack on January 31, 1945 off Luzon, with 77 killed.

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***Yunagi*:** She was operational in March 1945 and assigned patrol duties in northern Japanese waters. She was heavily damaged by air attack near Tsugaru Strait on July 14 and again by air attack on August 9. She surrendered and was scrapped.

Tachibana-class destroyer *Hatsuzakura* pictured in August 27, 1945 when she met an American destroyer in Tokyo Bay to discuss the entry of the Third Fleet for the surrender ceremony. The austere design of the Tachibana class is evident. Note the distance between the two small stacks, which demonstrates the similar distance between the boiler rooms, in an attempt to reduce the possibility that a single hit could cripple all propulsive power. (Naval History and Heritage Command)

Tachibana Class

The Tachibana class was completed too late to see any service beyond home waters.

***Enoki*:** She was sunk by a mine in shallow water on June 26, 1945.

***Hagi*:** She was damaged by American carrier aircraft at Kure on July 24, 1945. She surrendered at the end of the war and was handed over to Great Britain.

***Hatsuume*:** She was damaged by mine and air attack in home waters, but surrendered at the end of the war and was handed over to China, re-armed twice, and continued in service until the 1960s.

***Hatsuzakura*:** The most "famous" Tachibana-class ship, since she met units of the US Third Fleet in Tokyo Bay on August 27, 1945 to make arrangements for the surrender ceremony on September 2. She surrendered and was handed over to the Soviet Union.

***Kaba*:** She was damaged by air attack on Kure on July 24 and August 31. She surrendered at the end of the war and was handed over to the United States.

***Kaki*:** She was damaged by air attack on Osaka on March 19. She surrendered at the end of the war and was handed over to the United States.

***Kusunoki*:** She surrendered at the end of the war and was handed over to Great Britain.

***Nashi*:** She was sunk by air attack near Kure on July 28, 1945. In 1955, the ship was refloated and was recommissioned into the Maritime Self Defense Force on May 31, 1956, the only Imperial Navy ship to see service in Japan's postwar navy. She remained in service until 1972 as a radar trials ship.

***Nire*:** She was damaged by B-29 air attack at Kure on June 22. She surrendered at the end of the war and was scrapped in 1948.

***Odake*:** She surrendered at the end of the war, was turned over the United States, and scrapped.

***Shii*:** She was damaged by a mine in June 1945. She surrendered and was handed over to the Soviet Union.

***Sumire*:** She surrendered and was handed over to Great Britain and expended as a target off Hong Kong in 1947.

***Tachibana*:** She was sunk by American carrier aircraft off Hokkaido on July 14, 1945.

***Tsuta*:** She surrendered and was handed over to China, but not put into service.

Matsu/Tachibana Class Specifications (as completed)	
Displacement	Standard: 1,262 tons (Tachibana: 1,289 tons)
Dimensions	Length: 328ft overall / Beam: 30ft 6in / Draft: 10ft 9in
Speed	27.75kts
Range	4,680nm at 16kts
Crew	210

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ANALYSIS AND CONCLUSION

The destroyers covered in this book represented the cream of the Imperial Navy's destroyer force. These ships were also some of the largest and most powerfully armed destroyers possessed by any navy. Nevertheless, as was equally apparent with the Imperial Navy's earlier destroyers, these impressive ships had critical weaknesses. During the early part of the war, which included the Guadalcanal campaign, the weaknesses were not apparent. In fact, operating at night against American ships, the superb training and powerful torpedoes of the Japanese destroyers made them formidable adversaries. During the Guadalcanal campaign, Japanese destroyers took relatively minor losses against American surface ships and accounted for an impressive toll of Allied ships.

As the battle shifted to the Central and Northern Solomons, however, Japanese destroyers were no longer dominant, and by November 1943 they had lost their edge altogether as American destroyer commanders employed their ships aggressively, fully exploited their key technological advantage in radar, and gained faith in their torpedoes. In 1944, there were few surface clashes until October, when the series of large battles known collectively as the Battle for Leyte Gulf confirmed the inability of Japanese destroyers to adapt to combat conditions during this period of the war. In three surface clashes, Japanese destroyers were ineffective or defeated by American surface forces. Of the astounding total of 28 Japanese destroyers covered in this book that were lost during 1944, almost all were sunk by submarine and air attack. In the final analysis, the deficiencies in anti-aircraft and antisubmarine warfare capabilities spelled disaster for the Japanese destroyer force. The table below provides the causes of loss of the 93 Japanese destroyers covered in this book.

Japanese Destroyer Losses 1941–45 by Cause

Class (Number)	Surface	Submarine	Air	Other/Combination	Surviving
Asashio (10)	4	2	4	0	0
Kagero (19)	5	4	6	3	1
Yugumo (19)	4	4	9	2	0
Shimakaze (1)	0	0	1	0	0
Akizuki (12)	3	1	1	0	7
Matsu (18)	2	2	1	2	11
Tachibana (14)	0	0	2	1	11
Totals	18	13	24	8	30

Not surprisingly, the leading cause of loss was air attack. The number of losses to surface attack was also high, and reflected the fact that these ships bore the burden of conducting operations in 1943 in the Solomons where they faced an increasingly powerful and numerous American surface fleet. Other causes include six losses to mines and two instances of a combined loss to aircraft and surface ships. Losses built throughout the war, with only five in 1942, 19 in 1943, 28 in 1944, and 11 in 1945. The most telling statistic of all is that, of the 48 ships that made up the Asashio and the Type A classes, only a single ship survived the war. This alone confirms the bitter nature of the combat that Japanese destroyers were forced to fight.

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The only Imperial Navy warship to become part of the Japanese Maritime Self Defense Force (JMSDF) was Tachibana-class unit *Nashi*. She was raised in 1955 and recommissioned into service in May 1956 as *Wakaba*. Shown here in JMSDF service, *Wakaba* clearly maintained her Imperial Navy heritage and served until the early 1970s. (*Ships of the World*)

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